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THE FAST WAY TO HEALTH

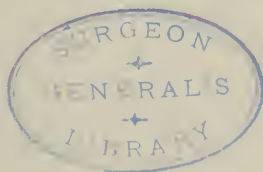


yours for Health
Frank McCoy

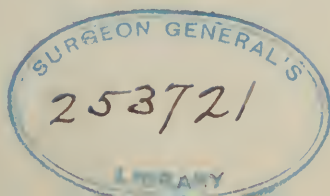
THE FAST WAY TO HEALTH /

*Being, as to the first part, an exposition of
the Fasting Cure and its application to
prevalent disorders, and, as to the
second part, a treatise on
Food, together with
Diets for the
Well*

BY
DR. FRANK McCOY



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AUTHOR'S PREFACE

The author of this book is one who believes that disease is not accidental, but is caused in every case by destructive habits, and that good habits must be substituted for bad ones in order to effect the permanent cure of any disease. Bad habits of thought, insufficient exercise, and innumerable other errors of life must be considered as contributing causes, but above all, dietetic mistakes must be corrected. The body is composed of material substances which can only be obtained from food, and the health of the physical organism depends more upon the proper use of food elements than upon any other single consideration. The office of the physician should be to teach the science of Health, and this I have been doing for many years through various writings in magazines, on the lecture platform, and in my private practice, but sheer pressure of circumstances has forced me to publish this work containing the invaluable facts of my dietetic experience and observation.

The need of a good, simple, and easily understood work on dietetics (such as I believe this to be) was apparent enough, and I had been considering the writing of it for some years. At the same time the astonishing results I was getting in the course of my everyday practice through the application of the principle of Fasting to the cure of common ailments confirmed me in my belief that when and what not to eat were quite as important as when and what to eat; that they were really negative and positive aspects of the same subject; and that it would be as logical to combine them together in a work of this kind as it would be illogical to treat of one only and not the other. Hence the plan of the book as you find it.

That men and women wanted such a book there was no lack of evidence, and that I might write it for them was an elevating thought that had been dwelling in my mind for years. And

there (like so many thoughts of the kind) it might have continued to dwell had not Fate taken a hand in the business.

People began to write to me from different parts of the country for advice, and a practice originally started and carried on by personal interview began to develop into treatment by mail, with all the onerous duties thus entailed. To tell patients all they wanted to know involved an amount of letter and report writing that began to assume formidable proportions. It soon became evident that the obvious thing to do was to embody the information in the form of a book, to be given to patients undergoing treatment and to such others as might be interested. This would provide a record of the rules and information desired in a permanent and lasting form, and one to which more respect and consideration might be shown than to anything in letters or pamphlets. The book therefore simply had to be written; and it was written.

I am not a writer of fiction, and the information contained in this book is based upon facts and not fancies. Other health subjects of importance other than dietary are referred to but not elaborated upon, as this would have been impossible in a book of this nature, and these must be reserved for future publications. I have intentionally refrained from referring to other writers and authorities, as I am sure that such references only tend to distract the mind of the reader from the point of view as it seems to me. No space is taken up by needless tables of food values, and the caloric standard is not even explained, as I find it of no real value in dietotherapy, but only bewilders the patient with unnecessary information. While it is hoped that the reading of this volume will be interesting, it is only the *practice* of the rules laid down that will bring the desired results in the cultivation of more abundant health.

FRANK MCCOY.

Los Angeles, January, 1923.

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PART I

CHAPTER I

DISEASE AND ITS CAUSES

The study of Health and Disease, which in these days has risen to the dignity of a science, may be said to be the classified knowledge of common human experience. No instrument or apparatus has so far been devised either by the ablest scientist or the most renowned inventor which can approach even closely, in delicacy of operation, the mechanism of the human organism, with its enormous range of functional power. Nature apparently created in man the very highest possible medium for the expression of divine intelligence.

A study of mankind therefore necessitates infinite research before there can be any degree of comprehension of the laws by which the creative force has taken the smallest electrons and made of them a fitting temple for the soul of man. It is apparent enough that the infant, thrust without any choice of his into a world of difficulty and danger, is governed by laws of which he himself is completely ignorant, but that he is at the same time endowed with an innate capacity for the development of reasoning powers, through the instrumentality of which he will ultimately be able to choose the path in life which will lead to the highest achievement and the most complete personal success. From somewhere out of the eternal the heart has learned to beat, the digestive organs to assimilate nourishment, and the cells to perform the necessary changes known as metabolism. It has always seemed to me that the greatest study should be devoted to mastering the knowledge of how to live so as not to interfere with the normal order of the natural processes.

For the condition we call "disease" (lack of ease) originates in every case because of a blocking of some function of the body through habits of life which conflict with the laws of nature.

Nature is orderly, but not unkind or revengeful, and we have only ourselves to blame if we permit destructive habits to conflict with the fixed and inexorable rules of an omnipotent, omniscient, and omnipresent Creator. If we suffer, the greatest folly is to believe it is because of our "stars" or fate, and not through some fault of our own. After all, our conscious habits of life are of our own choosing, and these should be made to harmonize with the never-changing order of divine law.

The ability to be able to point out every factor which can operate in producing disease in a patient is both an art and a science, involving as it does nothing less than a complete study of the patient's entire life and habits. A classification of some at least of the principal of such causes may be made in a book of this nature, and these, it is felt, can hardly fail to be of inestimable value to the earnest seeker after truth, by giving him a solid foundation of fact to work upon in his researches, and furnishing him with material from which an enormous amount of good can be obtained.

My experience and observation have convinced me that the most potent causes in the interference with health are the following:—

First: First and foremost in the cause of disease is the congestion of blood containing morbid material in organs or tissues of the body. In simple language, this thickened blood, surcharged with the products of imperfect metabolism, finds itself unable to pass as freely through certain parts of the body as is necessary for perfect health, and, becoming gradually dammed up in

organs or tissues, produces an engorgement, which interferes with the free and natural functioning of that particular part. There are few of the disorders from which mankind suffers where this condition is not present, and it is no exaggeration to say that it is the principal cause of all disease.

This condition of the blood stream is brought about by: the use of more food than the body actually requires for its repair and growth; improper kinds of food elements, used in excess; and insufficient exercise of the muscles so that the nourishment assimilated may be completely used up. This is one of the main causes of growths such as tumors and cancers, and likewise of those diseases which manifest themselves by copious discharges from the mucous membranes, such as tuberculosis, bronchitis, ovarian and womb disorders, and leucorrhea. It follows, in consequence, that the cure depends upon the elimination of this congestion, and a readjustment of the habits governing eating, exercising, etc., so that the body may be freed from the encumbrance. In this connection the fasting cure is so effective in producing quick results that the change experienced by the sufferer is hardly less marked than that felt by the prisoner when the ball and chain have been removed from his ankles. It has to be experienced to be properly understood and appreciated.

Second: Enervation is a condition found to be present in many diseases, and it is caused principally by a waste of nerve energy. The human body might be described as a radiating transformer of universal energy, but through wrong habits of thought and action large volumes of this energy are diverted into channels where it is wasted, and normal functioning is impeded because of insufficient power being sent to those parts where it is

most needed. The exercise of any of the destructive emotions is perhaps as powerful a cause as any of this waste of power, and if one gives way to fear, worry, jealousy, anger, etc., an enormous expenditure of energy is involved, which, if taken up in this way, is not available for use elsewhere. And this results sooner or later in impairment of some part of the system.

Eye strain must be avoided by anyone who is desirous of building up strength, and it will frequently be necessary to wear suitable glasses in order to relieve unnecessary effort in using the eyes. I find that too much shopping in crowded stores has a very enervating effect, and patients must be cautioned against this habit. Physical culture exercises, on the other hand, seem to be of remarkable assistance in building up energy, and the body is apparently recharged after systematic calisthenics. Whereas most kinds of work are enervating, graduated exercises, taken with a definite object in view, will be productive of very beneficial results.

Enervation can also be brought on through the irritation produced by disagreeable sounds, odors, sights, tastes and feelings, from which it will be apparent that there is great wisdom in quiet, well regulated ways of living. Enervation is one of the principal causes of auto-intoxication, as the eliminative processes simply must be provided with energy enough to enable them to expel the normal wastes of the body, and if this is interfered with some form of poisoning is the inevitable result, and the patient becomes ill. Health gives way to disease, which may necessitate for its cure a far greater expenditure of time, energy, effort, and expense than would have been necessary in devising and following suitable habits and regulations for a healthy and proper life. Keep well. You will find that it pays.

CHAPTER II

THE FAST WAY

Voluntary abstinence from food as a method for the cure of disease, is as old as animal life itself. We find unmistakable evidence that the lower forms of animal and bird life have instinctively chosen this means of restoring themselves to the normal whenever it was necessary. The pristine struggle for the "Survival of the Fittest" made it imperative that when the opportunity came for satisfying the cravings of hunger, the fortunate winner in the contest should satiate himself to the utmost with the food at his immediate disposal, and gorging upon the fruits of conquest seems to have been a reasonable procedure for primitive man whose sustenance was hard to obtain and difficult to preserve, both against putrefaction and the attacks of his neighbor who was no less eagerly desirous of satisfying his hunger for food.

As man's intelligence increased, he became more and more a ruler over nature, and we see him in the agricultural age learning how to store away, cunningly, grain and tubers, and even finally to preserve by drying the flesh of animals so as to be able to put away provisions for use as desired. When nutritious food became plentiful the cravings of hunger became less, and the cultivation of epicurean appetites for tasty dishes became more and more a vice, from which man has actually suffered in a greater degree than from the forced hunger of his primordial struggle against nature.

The way has been long down the pathway of time from our savage ancestors to the highly evolved man of this age, but who can imagine what advancement could have

been obtained if the human race had learned the benefits that could be secured spiritually, mentally, and physically through the control of false appetites? Here and there through the years that have gone, some calm soul has paused for a while to raise his voice in protest against sensual gratifications, but the mad crowd have little heeded the words or the spirit of such teachings, and have struggled on in their pursuit of Power over everything but themselves; making of their bellies the graveyards of their souls.

Such spiritual teachers as Krishna, Moses, Christ, Buddha, and Mahomet have awakened the minds of their followers in some degree to the moral and ethical desirability of control over sensual pleasures, but I believe a knowledge of the wealth of good effects to be derived from the practice of temperate ways will come more abundantly to those who understand that the practice of good habits will bring about rapid *physical* changes which will make for more immediate happiness here and now.

The earliest physicians and healers were practically united in teaching that good health depended upon abstemious living, and many of the early writers and teachers advocated the practice of denying food to the body that was suffering from disease. Through the centuries thousands of teachers have come and gone with their circles of disciples who have practised fasting for the cure of disease, but because of the necessarily strict regime to be followed, the majority of sufferers have either not been informed of this treatment by their physicians, or have passed the method by because of their belief in easier systems, or a conviction that it seemed like a Utopian dream. Our libraries are so full of books written upon this subject that the diligent seeker after the truth cannot fail to be interested in the published works

of such writers as Dewey, Haskell, Tanner, Carrington, Hazard, Eales, Sinclair, Macfadden, Tilden, Brook, and a host of other earnest investigators whose findings and sincerity of purpose cannot be questioned.

I have made a most exhaustive study of every method of cure from mind cure to modern surgery and gland therapy, and I have never found a single method that could approach even closely, in its results, the benefits which come from some form of the fasting cure. It is not my desire in this treatise on the subject to present to my readers an encyclopedia of Fasting and Diet, but rather to give them the results of my personal observation and investigation, and the lessons they seem to me to convey.

As the word "Fasting" may mean any restriction or regulation of food and drink, there are in consequence many different methods and degrees of fasting, from the elimination of one kind of food to complete abstinence from any food or drink whatsoever. Several bodily changes will be noted during the course of a fast which account for the remarkable results which follow this method of treatment. These are:—

First: Fasting gives the body a chance to cleanse itself of the accumulation of the products of imperfect metabolism due to the over-injection of food which the body could not use for building or repair material. As assimilation is retarded, elimination proceeds with increased activity, and the body is truly "house-cleaning" itself.

Second: The rest given the digestive organs is no doubt of great benefit to the person who has "lived not wisely but too well." Digestive and assimilative strength is increased to a marked degree if the stomach and intestines are allowed to pause in their work, that work which

has been going on night and day for so many years; and normal functioning is thus re-established.

Third: Normal hunger soon returns for simple, nourishing food, and replaces the cravings of an appetite which has known no satisfaction. One never experiences the natural sensation of hunger until disease is overcome.

Diseases cured: As fasting is undertaken with the object of giving the body a chance to cure itself, it can be used in some form in the treatment of every acute or chronic disorder. I do not know of a disease where fasting is contra-indicated. In the following chapters I shall discuss the treatment as applied in the common disorders where the results have been most startling.

General Conduct of a Complete Fast: In the conduct of the complete fast, all food is denied the body and the patient is allowed only water as a beverage. As a rule the amount of water taken is governed by the thirst of the patient, which is usually a reliable guide, but in certain fevers it seems wise to force the water-drinking to the utmost, and in the case of the patient's inability to swallow, through constriction of the esophagus or loss of mental powers, it is necessary to administer the water in the form of a slow enema or a "Murphy Drip."

Enemas: The best results can only be achieved if the colon is washed once or twice daily with an enema of warm water. This is best taken in the knee-chest position, allowing the water to flow slowly to avoid cramping. Use only plain warm water without the addition of soap or other irritating material. Retain the water in the colon for five or ten minutes while lying on the back, then sitting on the toilet, permit it to leave as slowly as possible, thus avoiding injury to the rectal membrane. No normal bowel movements will occur during the fast, but the elimination of toxins will proceed with more intensity

if this bulk of water is given to the colon to aid it in expelling the effete poisons which are constantly accumulating.

Bathing: As the action of the skin is one of the most important eliminative functions of the body, it is necessary that suitable measures be used to increase its performance. Shower or sponge baths of tepid water seem to get the best results for this purpose, and are preferable to warm tub baths, which are enervating and contraindicated for anyone who is attempting a regime for gaining strength.

Exercise: It is advisable to keep up all of the ordinary activity of every-day life, but physical culture exercises should not be used during the fast as the muscles cannot be developed while material for their growth is withheld. Increased strength is often felt as the fast progresses, because of the body gradually becoming free from the encumbrance of impurities and excess poundage. Breathing exercises are helpful in eliminating poisonous gases from the lungs, and also in giving the body a large supply of oxygen to use in its adjustment of metabolism.

Symptoms: As assimilation is suspended, elimination is increased, and the accumulated toxins which are being ejected from the system will generally produce a condition similar to biliousness, with headache and often nausea for the first day or two. If these symptoms persist, it is an indication of an especially bad case of auto-toxemia, and the fast must be continued at least until the headache and nausea disappear. Appetite for eating will vanish in the first few days and will not again appear for many days. A lonesomeness for food may be felt for some time by those who are not occupied in some work which distracts their attention from the usual hour for

meals. Patients must be careful about jumping out of bed too quickly or walking rapidly up a hill, as they will often feel dizzy from the sudden change in the blood circulation to the brain. This is an ordinary symptom and need cause no alarm, being due to the changes taking place in the blood stream. The tongue will become coated at first, and the breath foul and offensive, until the most virulent of the waste products are eliminated.

Length of Fast: If the complete fast be continued long enough, the tongue will become clear, the breath sweet, the mouth will be as clean as a baby's, and hunger and strength will return to the normal. This often takes from thirty to sixty days and I have known instances where it did not return for ninety days. Such lengthy fasts should not be attempted by anyone except under the care of a physician who understands every detail and symptom liable to occur. I seldom find it necessary to advise a patient to go to the extreme finish of a complete fast. Satisfactory results are generally realized by shorter fasts, followed by a proper dietary regime, or by a series of short fasts.

Fruit Fasts: Although theoretically the best results should follow the complete fasts, I have found by experience that fruit fasting will bring about very beneficial results, and for several reasons this seems the best fast to use for most cases, except in the severe forms of acute diseases. The fruits or fruit juices used contain only a small amount of nutriment, which does not seem to check elimination to any appreciable extent, and often seems actually to aid in expelling waste matter, by inducing a steady flow of fluids from the alimentary canal, and also in providing bulky material when the whole fruit is used. The fruits most commonly recommended are the orange, lemon, grapefruit, fresh apricots, cherries, grapes, and

apples. These fruits or their juices are used several times a day, often with the addition of Agar-Agar or Mineral Oil. Agar-Agar is a dried Japanese sea-weed which can be purchased in any drug store in a granulated form, and may be used freely to provide bulk, as it has practically no food value. Mineral Oil is sold in all drug stores under various trade names and is a harmless lubricant which aids in intestinal elimination. Detailed information will be given in the following chapters regarding the treatment of specific diseases.

Fasting and Starvation: Scientific fasting and starvation are very different, and one must never be confused with the other. If the patient voluntarily abstains from food when food is obtainable, he need not fear harm from such denial, as normal hunger will assert itself before the condition of starvation can exist. The habit of eating regular meals is so firmly established that people have died in a few days from the fear of starvation because they did not know that the body can live for a long time without food. In most cases of forced fasting there is also exposure to the elements, with a choking of the eliminative processes. This, however, is very different from a properly conducted fast where food may be had for the asking, and where the body is aided in many ways—by bathing, enemas, etc., and the patient may have the enjoyment of every pleasure save eating.

Patients should be cautioned not to argue with their friends who do not understand the philosophy of Scientific Fasting, as this only tends to disturb the mind of the patient, and may interfere with his cure, no matter how sincere he may be in attempting to follow this necessarily strict regime. "Thoughts are Things," and nothing but harm can come from trying to convert an obstinate friend who does not realize the difference between fasting and

starvation. The time to fast is when suffering from any acute or chronic disease, and the fast, or series of fasts, should be continued until the patient is cured. After the cure it should not be necessary ever again to subject oneself to such a treatment, if the patient will only make a study of those habits which produced the disorder and substitute better ones for them. Of course, there are times when food should be withheld for a meal or two, when one is very tired or under great mental strain from enervating emotion, such as grief or anger or intense pain, but fasting should not be made a habit for the well.

In the remaining pages of Part I of this book will be found set forth alphabetically a list of the disorders commonly met with in the author's office practice, together with a description of the treatment accorded to each, and particulars of typical cases selected from the office files. It may be explained that these are not put forward with any idea of inducing those who are sick to undertake the diagnosis of their own cases, or to lead them into thinking they have this or that specific trouble, but are quoted for the guidance of such persons as have been carefully examined by a reputable practitioner and pronounced to be suffering from some particular disease. To these the information can hardly fail to be of interest and benefit.

In order to understand the references in the first part of the book to such terms as "non-starchy," "salad," etc., as applied to vegetables, and the division of foodstuffs into "Proteids," "Starches," and so on, the reader should first of all consult the second part of the book where such terms are fully explained and the various foods and vegetables segregated and tabulated. It is true that in dealing with certain diseases, full lists of the vegetables recommended have been quoted in Part I where this has been deemed advisable, but to have kept on repeating such lists would have been obviously impracticable, and so the terms "salad," "non-starchy," etc., have been employed instead as a simple means of indicating some particular class or category.

CHAPTER III

COMMON DISORDERS AND THEIR TREATMENT

ACNE

This form of skin disease is manifested by blackheads, pimples, scales, pustules, crusts and inflammatory redness, appearing mostly on the face and back. The unsightly condition of the skin is very distressing to the mind of the patient, and there seems to be no well known remedy which has any marked effect in overcoming this irritating disorder.

It is especially liable to appear at the age of puberty, because of the systemic changes taking place at that time. The underlying cause is, however, an unwholesome state of the blood, produced by dietetic errors, and especially the excessive use of greasy food such as doughnuts, pastry, fried food, also candy and sugar. Constipation exists in nearly every case, and poor circulation of blood to the parts affected is often present. A contributing cause is often stoppage of the pores and sebaceous glands because of a dirty skin which has not been kept clean by sufficient washing with soap and water.

The cure depends upon the elimination of those excess materials in the blood stream which have produced the disease. This is best accomplished by a short fast on water and fruit juices, and adopting a diet free from greasy foods. The intestines must be kept clean by enemas, if necessary, and the skin and kidneys encouraged to eliminate by copious water drinking.

The skin may be further stimulated by frequent bathing, and by brushing the entire body with a complexion brush. The salt glow is especially recommended. Wet

the body all over and rub the skin with common salt until it glows, then take a cold shower bath.

To overcome the unnatural condition of the pores of the skin, the use of the ultra-violet ray, obtained through the quartz mercury vapor lamp, is recommended if you can find a physician who has this equipment. If this treatment cannot be obtained, take open air sun baths, entirely nude if possible, at least exposing the parts affected. Try to produce a slight sunburn so the skin will peel off, and the results will be more rapid; but do not expect permanent results unless you make the necessary dietetic changes, and keep the intestines free from the poisons which have produced the chemical changes which are responsible.

CASE 1. Boy, 16 years of age. Acne gradually appeared about the age of 12, increasing in severity until the time he presented himself to me. Was living with his parents, and the whole family was eating the usual unwholesome, greasy diet to be found in most homes. The boy's bowels did not move oftener than every second day, and as his mother did not believe in laxatives and considered the use of enemas a dangerous habit, he continued to be constipated. His face was a mass of blackheads and pimples.

A grape fast was recommended, and one of ten days' duration was taken. The patient ate three meals a day consisting entirely of grapes without any other food, but he was under no restraint as to quantity and took as many grapes as he pleased at each meal. He drank freely of water at all times, and took two enemas per day of one quart each of warm water. Every other day the patient took a salt glow. He was advised to stand in the bath tub and wet the body all over, rubbing the wet skin as vigorously as possible with common salt, from the face

to the feet, afterwards washing the body off with cold water, when the skin began to glow.

The patient came to the office each day for treatment with the ultra-violet actinic ray, which was used for the face, and of such a strength as to produce a sunburn. In summer time this treatment could have been taken simply by lying in the sun with the face uncovered for thirty minutes to an hour, in which time sufficient ultra-violet rays from the sunlight could be shed upon the face to get almost as good a result as with the concentrated rays of the quartz mercury vapor lamp.

After the fast of ten days the patient was put on a raw food diet, taking his choice three times daily of the following uncooked foods:

Swiss Chard	Turnip tops	Parsley
Green string beans	Kale	Carrots
Spinach	Celery	Turnips
Asparagus	Lettuce	Parsnips
Oyster plant	Cucumber	Beets
Beet tops		

These foods were combined together in different ways to suit the taste of the patient, and no other food of any kind was used for about fifteen days. Large quantities of water were drunk with this diet also.

Before the end of the raw food diet the face was entirely cleared of any sign of acne or pimples. After the fifteen days of raw food diet the patient was put on a general diet regime and was warned against too free a use of fatty foods and sugar. At the time of writing, after an interval of more than three years, the patient has had no return of the trouble.

ANEMIA (Thin Blood)

A common name for this disease is often, "green sickness," because of the fact that in the chronic form the

skin turns a greenish sickly color. This condition is the most common with young girls between the ages of thirteen and twenty, which is the period for the development of the sexual nature. Most of the cases will be found to have some prolapsus of the womb with a repression of the normal sex urge. This blocking of the mating instinct is no doubt responsible for the peculiar inability of the blood corpuscles to carry enough oxygen and iron to supply the cells with sufficient of these elements to insure perfect health.

Of course this disease may occur with either sex at any age, but the majority of cases seen are at the age of puberty, and with girls. In almost every case another factor will be noticed, and that is constipation. Except in a few rare diseases where diarrhoea exists with anemia, you will find a toxic state of the body induced by retention from the intestine caused by constipation, also that excess acidity of the stomach is present in all cases and must be considered in the dietetic treatment. Other symptoms which are common are: great weakness, dizziness, headache, nausea, cold, clammy skin, ringing in ears, feeble pulse, shortness of breath, pale tongue and nails, and weak eyes.

Contrary to general belief, the patient is not usually thin and frail looking, but often fat and apparently overfed. There is no reliable way of determining the degree of anemia except by a blood examination with the microscope. If anemia exists, there will be a deficiency of 20% to 50% in the red blood corpuscles which carry the iron and oxygen. In many of the cases the hemoglobin content of the blood will be only 25% to 60% of the normal 100%.

If anyone has told you that you are anemic, do not be satisfied until you have had a blood examination made

in a responsible laboratory. If anemia really exists, it is because of oxygen and iron starvation, and the causes which lead to this condition.

The cure depends upon these points:—

1st. The free use of foods containing the largest proportion of iron in an organic form, which is always preferable to the use of inorganic iron as used in iron remedies taken by the stomach, or given by hypodermic methods. All green vegetables are rich in iron, the chief in importance being spinach, asparagus, raw cabbage and carrots. The yolk of egg is perhaps the richest in this element, but must be used with caution because of the tendency to produce excessive fermentation and liver complaints if used in excess. The leafy green vegetables should be used in the salad form as much as possible, to avoid the changes which take place in the iron when the food is cooked. Avoid the use of all foods not containing iron or proteid, and make an effort to keep the stomach and intestines constantly supplied with material from which the assimilative process may extract the necessary iron.

2nd. Nude sun-baths should be taken as many times in the day as possible without sunburn or inducing too rapid a heart beat. The ultra-violet rays in the sunlight will temporarily increase both the hemoglobin and red blood corpuscles more rapidly than any other method of treatment with which I am familiar. An increase of 10 to 20 per cent is possible in an hour's sun-bath, but some of this is gradually lost by the next day, so it is advisable not to let a day pass without this treatment, and in that way a gradual increase will be noted which will become permanent if the proper food is used and other necessary health building measures are carried out.

3rd. Deep breathing of fresh air should be practised

several times daily. The increased oxygenation of the blood will make a temporary dizziness at first, but this must be expected and will soon pass away as the lungs and blood become used to more oxygen.

4th. A certain amount of light exercise in the form of calisthenics is desirable in order to encourage metabolism. Walking is perhaps the best form of exercise to be used, and must be increased gradually as the strength permits. Rest must never be considered helpful or necessary to a cure, except for the periods between exercise, when it is as essential as the exercise itself.

5th. Girls at the age of puberty suffering from this disease must use those exercises for the abdominal muscles which will strengthen the abdominal viscera, and bring back into position the organs that have been resting in the pelvic basin and forcing the womb out of position.

6th. Fasting on fruit is especially to be recommended for the first week, during which time the red corpuscles and hemoglobin will increase from five to fifteen per cent without any other treatment. This seems improbable at first thought, but has been proven by laboratory tests in hundreds of cases. As the waste material is eliminated from the blood, the quality of blood is improved, and the percentage of those essential parts is increased to a remarkable degree. During season, red cherries are the best fruit to use, as they contain more iron than any of the other desirable fruits.

Every one of the above points must be considered in this serious disease, and the general thought kept in mind that the blood must be purified, and the hemoglobin and red corpuscles increased by using every method known to have an effect upon such an increase, but above all, that suitable foods must be given the body to assimilate, from which the proper elements may be obtained.

CASE 2. Young lady, 24 years of age. Blood pressure low. Tonsils had been removed at the age of 17, and valvular leakage of the heart had been present ever since, caused apparently by the surgical shock. The patient looked in the best of health, but when her make-up was removed her skin was pale and anemic looking. The blood test showed only 50% of hemoglobin, in place of 100% normal. Red blood corpuscles were 2,150,000 in place of 5,500,000, and white blood corpuscles or leucocytes 3500 in place of 7500.

The patient was put on an orange-juice fast, taking the juice of one orange every two hours during the day, with a glass of water each time. Two enemas daily were advised, also two sponge baths. This fast was continued for one week, at the end of which time the hemoglobin had increased from 50% to 75%, the red blood corpuscles had increased to 3,900,000, and the count of the leucocytes was 7000 in place of 3500. It is to be noted that this increase took place when the patient was taking nothing but orange juice for nourishment.

After the orange juice the following diet was used for the next 40 days:—

Breakfast—2 Coddled eggs.

3 or 4 pieces of hard, thin, dry, brown toast.

Dish of stewed fruit such as prunes, raisins, figs, apple sauce, baked apple.

Lunch —Raw apples, 2 ounces of pecan nuts, 1 glass of water.

Dinner —Lean Beef.

2 Non-starchy vegetables, and a combination of salad vegetables.

Dessert: One of the stewed fruits as at breakfast and jello on alternate days—that is, fruit one day and jello the next.

An examination made at the end of this 40-day diet showed the blood to be practically normal. The patient was then put on a general regime, and urged to use a large amount of the blood-building foods, such as lean meat and salad and non-starchy vegetables. The noon meal was changed from the apples and nuts to a mixture of raw salad vegetables, with the addition of one starchy food. After several months the patient was still in excellent health, and the blood test showed the blood to be perfectly normal.

APPENDICITIS

This disease is invariably present in a chronic form before an acute crisis exists, and is preceded by colitis or inflammation of the colon, and constipation. At the outset of an acute attack there will be colicky pains in the right side at the lowest part of the abdomen. The abdomen will be distended and the muscles over the intestines tensed. Usually an attack starts with a chill, followed by a rapid rise in temperature. The tongue will be coated and the breath offensive. Nausea is usually present, and often the smallest amount of water will be vomited immediately. Any kind of food will start stabbing pains, because of the increased peristalsis induced. A careful examination of the rectum will show that the sphincter muscle of the anus is contracted only on the right side.

These symptoms are present in a true inflammation of the appendix, but it is quite common to make a quick diagnosis of appendicitis when any severe abdominal pain is present, especially if it is on the right side. When the stomach organ is prolapsed into the lower abdomen and distended with food and gases, symptoms will often be brought on similar to appendicitis. Gall stone and

kidney stone colic are frequently mistaken for appendicitis.

The cause will be found in every case to be a chronic state of impactment of feces in the colon, producing an inflammation of the large intestine. A contributing cause will be overeating and insufficient exercise. The lodging of seeds in the appendix is seldom present, and must not be considered as a common cause. This disease will often be very serious if not treated properly, but the cure is astonishingly simple if the following methods are used:—

The colon must be flushed with small enemas of tepid water every two hours at the outset of the attack. Sometimes it seems advisable to substitute paraffine or olive oil for the tepid water when sufficient water cannot be retained. Heat should be applied over the entire abdomen by hot water bottles or hot moist towels, and this treatment continued until the abdominal muscles relax. No food or liquid of any kind should be given the patient until all symptoms of the acute attack disappear. Complete rest in bed is absolutely imperative, to prevent the sagging and pressure of the abdominal viscera which would be present if the patient stood upright. If pus is present in the appendix it will often be necessary to continue the fasting and enemas for several days before a discharge of the contents of the appendix takes place. Often a stoppage of the small intestine exists, but this will correct itself if the body is given time and the treatment outlined is rigidly adhered to.

I have treated probably more cases of appendicitis than any other acute disease, and out of hundreds of cases there has been no fatality. After the crisis of the attack has passed, it becomes necessary to cure the chronic inflammation which exists in the colon, and constipation must be overcome. This will take a long period

of careful dieting, and you must not look for a quick cure of the chronic colitis present, as many weeks will be required before all irritation is removed.

(See Article on Constipation.)

CASE 3. Woman, 30 years of age. Chronic constipation since childhood. Had a sudden colicky pain in the right side, which persisted after several enemas had been taken. The patient's husband was under my treatment at that time for tuberculosis, and used the enema as an emergency measure in treating his wife, thinking that the cramps were caused only by constipation. As soon as he found that the tenseness of the abdomen did not subside, I was called in on the case. I diagnosed it as acute appendicitis, with a definite kink in the small intestines, causing an obstruction. The enema brought away very little fecal material, and because of the obstruction it did not seem wise to use a laxative.

The patient was fasted with only small sips of water, as nausea persisted for several days, and all liquids were vomited immediately after taking. Hot water bottles were placed over the entire abdomen, but the pain in the right side persisted, and after about a week the patient became delirious. I assured the husband and the relatives of the patient that the treatment with fasting and enemas and hot packs on the abdomen was the only treatment necessary, and that when the pus which had collected in the appendix would pass into the colon, the pain would be removed, also that the kinked intestine would unkink at the same time, as this was caused by the extreme tension of the abdominal muscles because of the engorged appendix.

Patient was delirious for several days, and during one of her delirious attacks, when I could not be quickly reached on the telephone, another physician was called

in who advised an immediate operation. A surgeon was also called in consultation, who said that the patient could not live till morning if the operation was not performed. A retired physician living next door likewise advised an operation, but thought that it was too late to save the patient's life.

As soon as I could be reached on the telephone I urged them to continue the same treatment, and not to consider the suggestions of the other physicians. It so happened that the husband had lost a sister in an appendicitis operation, so he finally decided to follow my advice. After about four days of delirium the pus started to flow from the appendix, and several quarts were washed out of the intestines with enemas. At the same time the impacted colon relaxed, and the fecal matter was quickly eliminated. At this time doses of flaxseed tea were given to the patient to assist in the elimination from the small intestines, but this was not advisable until the abdominal muscles had relaxed, so that a passage could be made through the intestines without danger.

The patient rapidly recovered from all of the acute symptoms, and after a few days was well enough to come to my office and take a course of abdominal massage treatment. No food was given until after all pain had subsided, when small amounts of orange juice were used. This fast was kept up for about 30 days in order to give the intestines sufficient time to recover from their inflamed condition.

After the fast the patient was put on a diet of soup made from non-starchy vegetables. This was kept up for a few days until she was able to resume a well-balanced diet chosen from those foods mentioned in connection with the treatment of constipation. The patient fully recovered, and is now enjoying perfect health. The con-

stipation has been entirely overcome, and from all appearances the intestines are in a perfectly normal condition.

CASE 4. Baby, aged 4 years. The mother called me on the long distance from a nearby town and described the child's symptoms which appeared to be those of appendicitis. I recommended that all food be taken away from the child, and that immediate treatment with enemas be started. The mother had been a patient of mine at one time and understood something of my method of handling appendicitis cases, so she was quite agreeable to start the treatment at once without waiting till I had an opportunity of seeing the child.

The symptoms of pain and colic did not disappear quickly, and after two days I was forced to make a trip to see the case. Before I reached the bedside an osteopathic physician had been called in, who advised them to discontinue the use of enemas, as he claimed it was a dangerous treatment to use in appendicitis. I reassured the mother that the enemas should be continued, and no food of any kind given to the child. The child fasted 8 days, taking only small sips of water, as both orange juice and any large amount of water taken could not be retained. After 8 days pus started discharging from the colon, and discharged steadily for about 4 days. The fast was continued until after all signs of pus discharge had ceased, making in all a fast of about 15 days, a much longer period than is usually necessary for a young child.

The appendicitis was completely cured and the child has been well right up to the present time (that is, for the last 4 years) without any return of colitis or appendicitis. During the treatment a peculiar change took place in the child which I have had occasion to note in many fasting cases. Until the time of the sickness the child was rarely

known to smile, and presented the appearance of a sad and serious faced little girl with a great sorrow. She never cared to stay on her mother's lap, and at such times as she was in my office with her mother she seemed afraid of everyone in the place and did not appear to have a spark of playful spirit about her. After the fast however her whole nature changed entirely and she became joyous and happy—of a temperament, in fact, almost exactly the opposite of what she had exhibited before starting the fast.

ASTHMA

Difficulty in breathing is the most characteristic symptom of asthma. Inhaling and exhaling the necessary air for the body's use are accomplished mainly by the action of the diaphragm, which is a flat muscle separating the lungs from the stomach and intestines. When the diaphragm is contracted the patient exhales the air and poisonous gases, and when it is expanded, air is drawn into the lungs. If stomach or intestinal gases are pressing the diaphragm upward, the patient will have difficulty in forcing the pressure down sufficiently to inhale. A weak diaphragm will be unable to do its work properly under this condition, and there will be a struggle to draw enough air into the lungs, resulting in the peculiar wheeze of the asthmatic when attempting to inhale. Of course, there are contributing causes such as irritating dust and pollen of plants, also a deranged condition of the nervous system. The patient usually wheezes along to a good age, with the misery of seeing every proposed remedy fail, until he dies from the effect of drugs taken in an attempt to relieve his symptoms. It may be truly said that at first he is afraid of dying and then afraid he will not.

A permanent cure depends entirely upon the following:—

First: The development of a strong diaphragm, so the patient can inhale and exhale to the extreme with perfect freedom of movement.

Second: Avoiding those foods which produce an excess of stomach and intestinal gas, until digestion is improved to the point where properly proportioned meals may be taken. The carbohydrates (i.e., sugars and starches) are the only foods which can produce enough flatulence to bring on an asthmatic attack, and must be entirely eliminated for a considerable period and then used with great caution. The complete fast should be used at the start of the cure if you wish to see the wheezing stop in from twelve to forty-eight hours.

A careful diet, free from carbohydrates, will slowly bring about a recovery from this distressing disease, but the magic of the fast will never be more quickly seen than in its application to this malady. If much bronchial mucus is present in the lungs, the cure will be slower but none the less sure. Advanced cases seem to yield as readily as those just beginning, so do not think you are an exception because you have tried everything from climate to vaccines, as I do not know of a single case coming under my observation where the cure was not complete and permanent if the patient followed instructions carefully. Probably the reason the old cases respond to this method of treatment as easily as the mild ones, is because the patient who has suffered so long will follow a strict regime without deviating in a single degree, whereas the patient whose symptoms are just beginning has hopes for a remedy which will relieve, and allow him to live without diet regulations. Do not waste time looking for an easier method; there is no other way.

CASE 5. Young man, 34 years of age. This patient came to me about 6 years ago. He had been subject to asthmatic attacks since childhood, and had not been able either to play ball or to climb hills at any time of his life. He smoked asthmatic cigarettes all day long, and kept asthma powders burning in his room most of the night. Had been doing this for several years, and seemed to be getting worse each year.

Was put on a complete fast for 20 days, using only water in whatever quantities desired. In order to relieve him quickly of the accumulated fecal matter found in the colon, the patient took, immediately following the examination, 4 ozs. of castor oil mixed with 4 ozs. of lemon juice. This, together with the enemas which he started taking, flushed the colon so completely of feces and gas, that he was able to sleep clear through the night on the very first night after starting treatment.

The fast was continued for 20 days, and then the following diet was prescribed for the next 10 days:—

- | | |
|------------|---|
| Breakfast— | Whites of 3 eggs. |
| | 3 Pieces of hard, thin, dry, brown toast. |
| | 5 Stewed prunes. |
| Lunch— | 1 Medium starchy vegetable in the following class: Carrots, turnips, parsnips, beets. |
| | 2 Non-starchy vegetables. |
| | 1 Salad vegetable. |
| Dinner— | A choice of 1 of the following: Lean beef, mutton or chicken. |
| | A choice of 2 non-starchy vegetables. |
| | 1 Salad vegetable. |

At the end of this time the patient was able to climb Mount Wilson, Mount Lowe, and Camp Baldy, three of the highest points in Southern California, on successive days, with no worse effect than a slight soreness of the muscles. His lungs were entirely free from any tendency

to wheeze, and the trouble has never reappeared since at any time of the day or night. For the last six years he has been living on a diet carefully selected from those foods which are not gas producing, using only such combinations as will harmonize without tending to cause flatulence. The patient is at the present time using some starchy food, but taking care to combine such food with the proper vegetables, so as to avoid causing the pressure of gas against his diaphragm from which he suffered for years, and which was the direct cause of his asthma.

CASE 6. Boy, 6 years old. Had been troubled with asthmatic wheezing since a few days after birth, brought about by constant gas pressure induced by indigestion in the mother, and given to the child because he was fed on the breast. The mother had nursed the baby for six months, and finally the child had been put on a diet of modified milk with the addition of barley water. The distention of the abdomen continued, and the wheezing kept the child awake every night of its life until it was brought to me at six years of age.

The child was fasted for $3\frac{1}{2}$ days on a fast of small amounts of orange juice and water, using in all about 6 oranges daily. The examination was made in the middle of the day and the fast started there and then, so that no other meals were given on that particular day. An enema was given in the middle of the afternoon and another about 8 o'clock at night, and the child slept through the entire night for the first time in its life. Since then it has slept 11 or 12 hours every night.

After the fast the following diet was given:—

Breakfast—Whites of 2 eggs.

2 Pieces of brown toast softened in hot water
and seasoned with butter.

3 Stewed unsulphured prunes.

Lunch—	Dish of cottage cheese.
	Dish of cooked spinach or celery.
	1 Piece of toast softened as at breakfast.
Dinner—	1 Small piece of steak.
	1 Non-starchy vegetable.
	1 Salad vegetable.

To guard against the possibility of any asthmatic attack during the night, an enema was used each night before the child was put to bed, but this was soon discontinued, as it was apparent in a very few days that there would be no return of the gas pressure. This diet was kept up for several months, and the child is now living on a well-balanced diet such as recommended in the menu for children in good health.

CASE 7. Old man, 82 years of age. Civil War Veteran. Had had asthma since shortly after the Civil War, and had been living for many years in a Soldiers' Home. Much of the time had been confined to bed, and for several years past had been in the Soldiers' Home at Sawtelle, California. Had been unable to work because of asthma and had lived on a pension almost entirely since the Civil War, except at such times as he was supported by his children. Previous to the Civil War he had been a blacksmith.

Patient was put on an orange juice fast, taking a glass of orange juice three times daily, with a glass of water each time. He continued this fast for about 25 days. After the second day all signs of asthmatic wheezing disappeared, and after about the twentieth day the mucous discharges which he had coughed up for years entirely disappeared, so that before the end of the fast his lungs were as clear as if there had never been any trouble.

The diet he was put on thereafter was partially chosen from the table at the mess room in the Soldiers' Home, supplemented by food which he purchased outside of the

institution. I may say that I find it almost impossible to diet an inmate of an institution of this kind so as to effect a permanent cure from asthma, unless the patient uses only certain articles of food from the regular fare and supplements these with articles purchased outside the establishment, as all such institutions provide an overabundance of starchy foods, and an insufficient amount of those foods which it is necessary for the asthmatic to use. These old soldiers who do very little work and get only a small amount of exercise, are turned into veritable walking gas factories through the agglomeration of starchy foodstuff fed to them at the mess table. I spent a great deal of time personally teaching this case the proper food combinations so that he would be able to select as large an amount as possible from the food furnished to him at the home, as the smallness of his pension made it impossible for him to live entirely outside of the institution. He is still living at the same home and is in perfect health for a man of his age, without any tendency to asthmatic symptoms.

AUTO-TOXEMIA

This condition is very common, and is present in nearly every disease. Often when a complete physical examination will not disclose any organic disease, and where the diagnosing physician is baffled as to the cause of the patient's depression, it will be found that he is simply suffering from a form of self-poisoning from the products of perverted metabolism, the poisons thus engendered not being sufficiently eliminated through the usual channels for the purpose.

In my office experience I have had many patients present themselves to me for examination, who had been put through most exhaustive examinations by other physi-

cians who had told them to go home and forget about their troubles; that there was really nothing wrong with them; that they only imagined they were sick; or that they must be nervous. If these patients do not suffer from pain, and I cannot discover any organic disease, I always assume that they are suffering from some form of toxemia, which is, in almost every case, produced by poisons manufactured within their own bodies, but which have not been eliminated. The toxins produced in the organism alter the chemistry of the blood and other fluids in which the tissues of the body live. Perfect health depends upon the proper chemistry of the fluids of the body.

This self-poisoning is produced mainly by the following factors:—

When the body is enervated by a waste of mental or physical energy there will often not be enough nerve force to operate the eliminative functions properly, and the normal wastes of the body will not be thrown out rapidly enough, but will remain in the tissues and interfere with the normal functioning of the organs and glands. Constipation exists in nearly every case of auto-toxemia, and is responsible for providing much toxic material which overburdens the blood with waste products. Over-eating must be noted as one of the principal causes of auto-toxemia. If more food is used and digested than the tissues can assimilate there will be an excess of unabsorbed food material in the blood stream with a consequent state of self-poisoning. If food material in the blood cannot be used by the body for repairing tissues, it will in every case act as a poison until it is eliminated.

Another cause worth mentioning is too free a use of those foods which make an excess of bile. The bile is used as a digestive fluid, and also as a method of excreting

poisons. All carbohydrates and fatty foods must pass through the liver in the changes necessary before they can be used by the cells of the body. If the liver is overworked with these food materials, it will not have sufficient time or energy to perform its regular function of excreting the normal wastes of the body. If the skin is not kept active by sufficient bathing and proper exposure to the air, its functional efficiency will be lost, and this will be another cause of the retention of toxins in the body.

Anyone suffering from auto-toxemia will feel very depressed, will be tired at all times, and sleep will not refresh him. He will have a coated tongue, a poor circulation, bad color of the skin, and will have "the blues" without any good and sufficient reason. This condition can be changed quickly by adopting a treatment designed to increase elimination, and may be permanently cured if good habits are substituted for bad ones, and a general regime for constitutional upbuilding be adopted.

Some form of the fasting cure is necessary in order to induce rapid changes. A typical case of auto-toxemia may be cured in a few days by a fast of fruit juices and water. If a headache starts on the first day of the fast it is an indication of a severe form of toxemia, and the fast must be continued until the headache entirely disappears. It is advisable to continue the fast for several days after all unpleasant symptoms leave. The skin should be washed twice daily with sponge or shower baths, and at least 2 warm water enemas daily should be taken. Drinking large quantities of water is especially recommended in this disorder, so that the kidneys may have sufficient fluid to aid them in getting rid of the accumulated toxic material which has been located around the excretory organs that have not been functioning well enough to carry on the necessary elimination.

Lack of sufficient exercise is often a potent cause of auto-toxemia, as the muscular functions of the body must be used enough to take up the food material which has been assimilated. If you attempt to live on a small diet and lead a sedentary life you will have many dietetic problems which could be easily solved by eating a little more food and taking a large amount of exercise.

The following case will serve as a guide to those who are suffering from the symptoms of auto-toxemia, and who have been assured that they have no other organic or functional disease:—

CASE 8. Male, 37 years of age. This man was engaged in conducting a very large business. Found himself going to sleep at his desk in the middle of a busy day. Was keeping good hours, and living a temperate life as far as he knew. Was alarmed at his condition and visited a number of doctors who told him he was perfectly well. Had passed life insurance examinations, and just before presenting himself to me for treatment had been re-examined and had taken out additional insurance. In spite of the assurance that he was perfectly well by the examining physicians, he realized that there was something radically wrong with him.

Upon examining the patient I found evidence of an enlarged liver, fatty heart, and about 15 lbs. of weight over the normal. Outside of these points no organic disease was discovered. The patient was started on a fast and continued on it, taking a glass of orange juice three times daily for 14 days. After the headache of the first day had disappeared the patient gradually increased in strength, and his sleepiness during the day time left him altogether. After the tenth day of the fast he declared that he was doing twice as much work each day as before the fast started. His weight was reduced about 20 lbs. in the

14 days of fasting, and after adopting a carefully selected diet he gradually regained five of the pounds that had been lost, so that my original estimate of his proper weight was correct. His skin became clean, and his eyes clear. His tongue lost the fur coating it had had for months, and he has remained in perfect health since the time his fast was completed. He is now living on a well-balanced diet and is exercising regularly at a gymnasium, in addition to exercises taken each morning and evening at his own home. He says he feels like a new man.

BACKACHE

This is a symptom from which I find many patients suffering. A surprisingly large number of people who are not conscious of any other trouble come to me for diagnosis and treatment in order to be relieved of some form of backache. This distressing symptom has a variety of causes, such as:—

1. **Spinal Lesions.** There are various forms of backache caused by spinal lesions. These lesions have been caused in some cases by accidents, faulty postures assumed in certain classes of occupation, or relaxation of the muscles attached to the spine. Spinal lesions are subluxated or partially dislocated vertebrae which have been pushed out of position or have slipped out of place on account of muscular weakness. Backache from spinal lesions may occur at any part of the spine, and will also affect organs of the body by an irritation or inhibition of the nerves issuing from the subluxated vertebrae.

2. **Misplacement of the Uterus.** In females, misplacement of the uterus will produce a persistent dragging-down pain in the lower back, because of the fact that

the sagging organ is pulling upon ligaments which are attached to the spine.

3. Lumbago. Lumbago in the male usually arises from some disorder of the prostate gland or an irritation of the urethra or bladder and in the female from uterine or bladder disorders.

4. Inflammation of the Bladder. In either sex inflammation of the bladder is a constant source of distress in the lower back and a chronic inflammation of the bladder will show more pains in the back than in the bladder itself.

5. Kidney Stones. Kidney stones produce a sharp colicky pain in the right or left side slightly towards the back.

6. Occupational Strains. Aches in the upper back are often caused by occupational strains such as are brought on by sewing or knitting for a long period of time.

7. Muscular Weakness. Backache may be caused simply by general weakness of the back muscles which have not been sufficiently exercised.

If you are suffering from any form of backache you will find it necessary to adopt a general body-building regime, in order to be permanently cured. If spinal lesions exist it is advisable to take osteopathic or chiropractic treatments, and to supplement these by graduated exercises for the back muscles, assuming the prone position by lying face downwards on the floor, and using those exercises particularly selected and described for that position in Chapter XIX, Part II. Do not expect to achieve a permanent cure of any kind of subluxated vertebrae if you do not take these exercises for building the back muscles, as the vertebrae will slip out of position almost as

quickly as they are put in place by the operator, if the muscles are not strengthened in the meantime.

Since much of the backache complained of is caused by prolapsed abdominal organs pulling upon the spine, in addition to the dietetic changes which will be recommended it will be necessary to exercise the abdominal muscles to the utmost, with exercises taken lying on the back. I have never seen a case of prolapsed stomach or uterus which could not be raised to normal position if these exercises were persisted in for any length of time. (See article on Prolapsus of Organs.)

If backache is caused by pain from the bladder reflexing in the spinal nerves, it will always be necessary to drink large quantities of water between meals, to keep the urine so diluted that it will not be irritating to the bladder.

Any ache in the lower back will be relieved by applications of hot towels, or the use of a high candle power therapeutic lamp, if such is available. Heat may also be applied through the enema, or through treatment by rectal irrigation. A suitable instrument may be purchased in any surgical supply store, which may be attached to the enema bag, and if this is inserted in the rectum and quantities of hot water allowed to run in and out, it will have a very quick effect in relieving either bladder, or prostatic, or uterine inflammation. I find that lumbago, sciatica, rheumatism, and pain in the shoulders and arms may often be instantly relieved by applying heat over the bladder and over the lower spine upon those nerves which carry the nerve impulses to the bladder. Much pain in the back is mistaken for rheumatism, when it is only a reflex from an irritated bladder or uterus or prostate gland.

In the cure of any form of backache it is well to begin

with a general constitutional treatment, and the fasting cure is especially advised in all of those forms of backache which occur in the lower spine. After the diet is resumed, foods which are irritating to the bladder must be avoided, such as onions, garlic, and sometimes asparagus.

CASE 9. Young woman, 35 years of age. Suffering from severe pains in the lower back. Had taken many courses of osteopathy and chiropractic treatments, with practically no relief. She came to me for treatment mainly because she was constantly bilious, and hoped that a course of diet treatment would give her relief.

I found the gall bladder enlarged and filled with thickened bile, showing the inability of that organ and the liver to do the amount of work the patient was attempting to force them to do. I also found a chronic cystitis or inflammation of the bladder which the patient had never been conscious of until I made the examination and introduced a sound into the urethra, which caused a great deal of pain. This "sound" is a small, smooth, silver instrument for probing into the urethra, and should cause no pain when introduced, other than a slight sense of discomfort. The patient remembered that she urinated quite frequently, and even had to get up at night several times for this purpose, although she had never had any distressing symptoms in the region of the bladder.

I told her that her backache was being caused by a bladder which was being constantly irritated by urine overloaded with poisonous material that the liver had been unable to eliminate properly in the form of bile. My conclusions proved to be correct, for as soon as the urine cleared of the excess of bile pigment the bladder inflammation gradually left, and the backache then disappeared entirely.

The patient was fasted for about 12 days, using only large quantities of clear water without any fruit juice except that which she took at the start of the fast to stimulate the flow of bile. 4 ozs. of grapefruit juice were taken with 4 ozs. of olive oil just before retiring on the first night of the treatment. This passed through quickly, bringing with it quarts of greenish-black bile which was eliminated from the liver and gall bladder. The water fast was then taken, and after this was completed a general well-balanced diet was resumed. The patient was specially cautioned to avoid foods tending to cause biliousness, and was advised to drink more water than she really desired between meals, in order to insure a free flushing of the bladder.

CASE 10. Man, 62 years of age. Troubled with lumbago. I found the cause of this to be an enlarged prostate gland. This was reduced through a plain water fast of three weeks' duration, with treatments twice daily of rectal irrigation taken while sitting on the toilet, followed by an enema taken in the knee chest position. The patient used six quarts of hot water each time, allowing it to run in and out against the prostate. This, combined with the fasting, reduced the prostate to practically normal size. The lumbago entirely disappeared after several days of the treatment and has never reappeared.

CASE 11. Married woman, 35 years of age. Had the history of many kinds of backache for years. Careful questioning disclosed the fact that the backaches started immediately after an operation in the hospital where a curettement had been performed. It was necessary to catheterize the patient at the time of the operation, which was done by the nurse in the hospital with a glass catheter. A few weeks after this hospital experience the patient was again taken to the hospital with what was diag-

nosed to be spinal meningitis. Her back had been troubling her ever since the operation, but an acute form developed, and she was in consultation with physicians who decided that her trouble was spinal meningitis. She was kept in the hospital for several weeks, and gradually recovered sufficiently to go home. Attacks of a similar nature occurred off and on for several years, and gradually the contraction and pain between her shoulders became almost unbearable. After many treatments had failed, she applied to me for diagnosis.

I found that I could produce a pain in her back every time I examined the urethra and made a certain pressure. I assured her that this pain must be caused by a reflex from the bladder, and treatment was started to cure an apparently persistent cystitis. The patient was fasted for several days and then put on a milk diet, and improved slightly. On the milk diet the patient had less pain most of the time, but occasionally would have a severe attack between her shoulders. She improved in health in every way, but the pain in the back did not disappear entirely.

While visiting at a mountain resort a hemorrhage of the bladder developed suddenly, which could not be stopped by the local doctor. She was hurried to Los Angeles, and cystoscopic examination made of the bladder. This examination is made by dilating the urethra, and introducing a light into the bladder. This seemed necessary in order to locate the spot from which the blood was flowing. After much probing a hard substance was found lodged in the urethra, which when extracted proved to be a small piece of glass. The bleeding instantly stopped, and the backache entirely disappeared as soon as this was removed. The patient has never experienced any form of backache since. We assumed that

the glass had been left in the urethra ever since her first operation in the hospital. I cite this case to show you how very definite this bladder reflex is, and how it can produce pains which will be mistaken for many other diseases.

BILIOUSNESS OR TORPID LIVER

The liver is a spongy organ for the production of liquids necessary to digestion, which are made from waste products of the body and are thrown out through the liver into the intestines to aid in digesting food at the same time as they are expelled.

When the skin becomes a yellow, sallow color, the tongue is coated, and headache persists, it is an indication that bile is being stored up in the liver and not sufficiently eliminated. Some causes of this faulty elimination are the following:

1. Eating more food of every kind than the body can use and make a part of the cell structure. There might be no sign of an organic disease of the liver, but just an inability to function well enough to take care of an unnatural burden placed upon this organic function.

2. Inability to take care of a normal amount of food, because the body is enervated by bad habits other than eating, which waste energy that should be used by the liver. A sedentary life, late hours, and excesses of every kind produce conditions which cannot really be completely overcome even by the most judicious dieting, beneficial as this undoubtedly is.

3. Constipation may exist and produce intestinal toxemia by the re-absorption of poisons which have not been expelled rapidly enough.

4. Although "the blues" are usually caused by this retention of bile, it is possible, on the other hand, for a

bad mental state of depression caused by any of the destructive emotions, so to effect the liver action that stagnation of the biliary fluids will be produced.

5. Another cause is often the stoppage of the bile ducts by catarrhal inflammation of the ducts, causing stricture by pressure of tumors or feces in the Hepatic Flexure of the colon; also the pressure caused by pregnancy, and by the lodgment of gall stones which stop the flow.

Another cause, which has been rather alarming in recent times, is the use of home-made liquors and home-brew. Heavy beers and ales have always been hard for the liver to handle, but the "boot-leg" preparations and home-brew beers produce a form of disease which when well developed seems almost impossible of cure. I have personally known of many cases of death which can be traced to this cause, where the autopsy has shown that the liver had stopped functioning without any organic disease.

After understanding these causes, it is not difficult to formulate the necessary method of cure. Bad habits must be overcome which cause this unwholesome retention. Unquestionably the entire elimination of the starches, sugars, and fats for a considerable period of time will bring about very satisfactory results, but the cure is rapid if a fruit fast is strictly adhered to for a few days, followed by careful dieting until the liver is able to do a reasonable amount of work, and all bilious habits are corrected. Clinical experience and observation have shown beyond the shadow of a doubt that large doses of olive oil, combined with an equal amount of the juice of some citrus fruit, such as the orange, lemon, or grapefruit, will dissolve the thickened bile and aid in bringing about quick results in patients suffering from

any form of inorganic liver trouble. The exact dosage and time for taking are described in detail in the cases given at the end of this article.

Jaundice is often present, when the skin is a decided lemon or orange color, but if cirrhosis or some other organic disease does not exist, the bile pigment will be quickly removed and the skin speedily restored to its normal color if a suitable fast is used after the proper dosage of olive oil and fruit juice has been taken.

CASE 12. The following case is typical of many commonly met with in my office practice:—

Young lady, 34 years of age, dark hair, dark eyes, sallow complexion. Of a bilious temperament. Had had headaches for years, which could only be relieved by large doses of calomel, which she had taken until the liver did not seem to function properly without the stimulation of this mercurial preparation. Ordinary headache remedies had had no effect. Missing a meal would always bring on a severe form of sick headache, making it necessary for her to stay home from her work as a school teacher, and remain in bed in a darkened room until the calomel took effect.

I assured the patient that it would be necessary for her to have a headache for a day or two at the start of the treatment, until elimination of the bile had been fully established, when her headache would disappear, and she would be no longer subject to this distressing trouble. I had a difficult time confining her to a strict fast of water with a glass of orange juice three times daily, as her headache became very severe, and she begged hard for some remedy to stop it. I was, however, successful in keeping her on the fasting regime until the headache disappeared, which was about the end of the second day.

She continued to fast for 10 days, and resumed her

school work as soon as the headache left her, after the second day of the fast. The tongue gradually lost its coating, and at the end of ten days the sallow skin had cleared, the eyeballs were again white, and she felt the return of her best physical and mental powers. Since the completion of the fast she has lived on a carefully selected diet, using a larger amount of greens and salad vegetables than formerly, and has also increased her physical culture exercising. It seemed advisable to take enemas daily for several months until the intestines were able to function normally. She has remained in the best of health ever since, and for over two years has had no return of the headaches.

During the time this patient was undergoing her treatment, her mother took almost identically the same treatment as the daughter, and was cured of migraine headaches, which she had had since a small child. These headaches occur at periodic intervals, on one side of the head usually, and are generally considered incurable, arising from some supposedly unknown cause which I have found to be always the same as in any other kind of so-called sick headache.

BLADDER INFLAMMATION (CYSTITIS)

In acute inflammation of the bladder pain will frequently be felt when the bladder is full of urine, and also immediately after it is emptied of urine. As the walls of the bladder collapse with no urine to hold them apart, one part of the membrane lining the organ will rub against the other part, producing a shooting pain not only in the bladder itself but up either side of the groin to the lower spine.

If the pains occur only at this time it will not be hard to understand that an inflammation exists in the bladder

which is responsible, but a chronic inflammation may exist which does not produce local symptoms in the region of the bladder, but is evidenced by reflex pains and aches in other parts of the body.

An examination of the urine will show either an excess of acidity or an exactly opposite condition of alkalinity, usually produced by ammonia. You may test your urine to see whether there is an alkaline or acid excess by using what is called "litmus" paper, which can be purchased in any drug store, but usually if the ammonia odor is not present the urine will be found to be of unusually strong acidity.

Outside of the local inflammation caused by venereal diseases, we may say that the irritation of the bladder is caused by irritating substances in the urine which inflame the lining of the bladder or the urethra, the passage leading from the bladder.

Such foods as onions, asparagus, garlic, and all alcoholic drinks have a direct effect in increasing bladder inflammation when it is present, as they contain irritating substances which the body must eliminate through the urine. During foggy or wet weather those who suffer with this disorder will find that they have more trouble, as more elimination of toxins will take place through the urinal system than usual, because the skin will not eliminate as much as in dry weather.

Prolapsus of the stomach or intestines will often produce a mechanical irritation, because in many cases the sagging of these organs will be sufficient to cause direct pressure upon the bladder, and force it out of position.

In attempting a cure of either the acute or chronic form of this disorder, it will be found advisable to employ the fasting method, and no matter what kind of irritating material exists in excess in the urine it can be eliminated during the fasting period if a water fast is used.

In case you have found that the urine has an extra amount of acid in it, the cure will be hastened if milk of magnesia or lithia is added to the water used during the fast, as this will make the urine bland and neutral during the treatment. If the urine is filled with ammonia, this addition of alkali will not be necessary, and in that event only plain water should be used. Hot sitz baths are to be recommended, and these are taken by sitting in the bath tub in about 9 inches of hot water with only the hips and feet immersed. The water must be as hot as can be borne by the skin. Women will find that several hot douches a day will aid in relieving the symptoms, until the lining of the bladder is completely healed.

In an acute attack it will always be found that some relief can be obtained by lying on the back with the hips elevated, so as to change the position of the bladder. In every form of bladder disorder you will find it advantageous to finish urinating while sitting on the toilet, by bending forward with the hands on the floor so that you are practically standing on all-fours. This tips the bladder into the normal position for urinating, and it can be completely emptied from this position without any after-flow of urine such as commonly occurs to a sufficient extent to soil the clothing. Heat should be applied over the bladder through the medium of a hot water bottle or hot towels, or best of all by the radiations from a high candle-power therapeutic light, if you are able to get this treatment.

I cannot too strongly emphasize the fact that a large proportion of the pains experienced in different parts of the body are caused by a mild chronic form of bladder inflammation of which the patient is often not aware. If the painful symptoms in any part of your body are more pronounced when the urine is heavy and full of cloudy waste material, you may rest assured that much of this

pain is caused as a reflex from the delicate nerves of the bladder or urethra, and you cannot expect to be entirely free from these pains unless you order your way of living so that this membrane will remain healed from all inflammation. The following two cases are typical of many:—

CASE 13. Woman, 32 years of age. Had suffered for years with a pain in the left shoulder which had been called “neuritis” by a number of physicians. Some relief had been experienced by treatment at mineral springs where she drank large quantities of alkaline water and took alkaline baths, but for several years there had not been complete freedom from the pain in her shoulder. She was forced to urinate four or five times each night, but no connection was suspected between the shoulder pains and the bladder irritation.

I assured her, after examination, that the so-called “neuritis” was caused entirely by a reflex from the bladder, and to prove my contention, while she was lying on my examination table I catheterized her, and washed out the bladder with two quarts of warm water. This treatment took four or five minutes, and by the end of that time the pain in the shoulder, which was very acute, entirely disappeared, and without any other treatment did not again appear for several days.

After being convinced that I had found the irritated place responsible for her neuritis, she started a treatment of fasting and dieting to remove the tendency to form urine which was causing the irritation, taking a glass of water every half hour during the day. This was continued for ten days, and the patient was then put upon a well-regulated diet using every kind of food desired, in proper combination, with the exception of such things as onions and garlic which are always contra-indicated in this disorder. This cure was completed over four years

ago, and there has never been a return of either frequent urination or neuritis.

CASE 14. Woman, 52 years of age. Was confined to bed with an acute attack of cystitis which had lasted over three weeks. As far back as this patient could remember there had been a chronic irritation of the bladder, and all her life she had taken alkaline remedies in attempting to counteract the urine acidity, but at the time I was called in on the case none of the remedies were affording any relief.

The patient was immediately put upon a water fast, using over two gallons of water daily, and as soon as enemas had cleaned out the entire alimentary canal, all her bladder pains disappeared. The water fast was continued for ten days, after which time the patient was put on the following diet:

1 Glass of raw milk every hour until 3 quarts were taken. This was continued for eight days, and then gradually increased until she was taking 6 quarts daily.

This milk diet was kept up altogether for a month, and after that time the patient was allowed to resume a normal diet. There has been no return of the cystitis for more than eight years, and neither treatments nor remedies have been used during that time. In spite of the fact that the patient had suffered during all the years of her life, she has remained well because she has rigidly adhered to strict dietetic rules such as are explained in the second part of this book. (See also cases 10 and 11 under "Backache.")

HIGH BLOOD PRESSURE

There is no way of determining the blood pressure without an examination with the Sphygmomanometer by a competent physician. This instrument contains three hundred millimeters of mercury, and when it is properly

attached to the upper arm the blood pressure can be determined by measuring how many millimeters of mercury will be forced up in the column by the pressure of the brachial artery. The pressure should be between 120 and 130 in an adult. If it registers above 140 at any age, it should be considered positive evidence of high blood pressure, which is brought about either by hypertension of the arteries, as in gout or rheumatism, excessive mental strain or worry, or is due to hardening of the arteries.

Hardening of the arteries may be only a thickening of the arterial walls or may be due to deposits of lime on the inside of the arteries. In either case the cure is entirely dependent upon dietetic changes. A long fruit juice fast is always indicated, and I have never had a case under my observation and control where the pressure was not reduced to the normal by this method. The thickening of the walls or deposits on the walls is caused in every case by a toxic state of the blood, which is produced by dietetic errors. I find that the usual dietary prescribed depends upon the elimination of meats, alcohol, and tobacco, but I seldom find a patient with this trouble who has been fond of any of these so-called agents to the cause. In every case the patient has been a heavy starch and sugar eater, and after the fast, when the pressure is reduced to the normal, the permanency of the cure depends entirely upon the regulation of the use of the carbohydrates, and often upon their elimination for a long period of time.

I have made elaborate tests to prove this theory, having patients use carbohydrates one day and not the next, and I have been able to tell the day the carbohydrates were used, by a blood pressure examination alone. It is advisable to diminish the intake of liquids if no kidney disease exists, as this will reduce the volume of blood and relieve some of the arterial tension. The bowels must be

kept open by enemas if necessary, and the skin encouraged to eliminate properly by sponge or shower baths.

The following cases will be sufficient as models for you to follow, but remember, these instructions must be followed to the letter if you expect to reap the benefits which thousands have received.

CASE 15. Man, 67 years of age. Systolic blood pressure 265 millimeters. The pressure in his head was so high that he had been unable to lie down for over two weeks, and what little sleep he was able to get was taken sitting in a Morris chair. The blood pressure had affected his brain, so that the power of speech was impaired, and he could not make himself understood.

The patient was immediately put on an orange juice fast, using the juice of an orange every two hours with a glass of water each time, and taking one enema and one sponge bath each day. Blood pressure was gradually reduced in the course of the fast until it reached a normal pressure of 125 millimeters systolic pressure. The fast was continued for about thirty days, and then the patient was put on the following diet:—

Breakfast—2 Eggs.

3 Pieces thin, dry, brown toast.

Dish of stewed prunes or figs.

Lunch— Choice of a mixture of the following non-starchy salad vegetables: Swiss Chard, green string beans, spinach, asparagus, oyster plant, beet tops, turnip tops, kale, celery, lettuce, cucumber, parsley, carrots, turnips, parsnips, beets.

Dinner— Choice of one of the following: Lean beef, mutton, chicken, fish, Belgian hare.

Choice of 2 cooked non-starchy vegetables from the following class: Spinach, asparagus, summer squash, string beans, lettuce, celery, cucumber.

Choice of one or more of the following salad vegetables: Lettuce, celery, cucumber, tomatoes.

No dessert.

A diet similar to this has been continued for the past 8½ years without an increase in blood pressure. At various times during that period I have re-examined the patient and found the blood pressure to vary between 125 and 130 millimeters. I wish you would especially note in this case that the cure was permanent, and the patient has remained in good health ever since.

CASE 16. Married woman, 42 years of age. Suffered from pains in the head, as though an iron band were clamped tightly round the skull. Was having profuse menstruation, which continued most of the month with very few intervals in which it stopped entirely. Systolic blood pressure was 228 millimeters.

I explained to the patient that I believed high blood pressure was producing the excessive bleeding, and that in this way she was being relieved of the danger of a still higher blood pressure, with the possible rupture of a blood vessel in the brain which would cause paralysis or apoplexy. A fast was started on a glass of grapefruit juice taken three times daily, with a glass of water. The usual enemas and sponge baths were taken, and the blood pressure reduced to 125 millimeters systolic in 4 days. However the fast was continued for several days longer, and the patient then resumed a well-balanced diet, using a selection similar to the one in the case last cited. Her blood pressure has remained normal for about a year and a half. Menstruation has entirely ceased, and she has passed through the menopause period safely, without any of the symptoms so commonly associated with that change.

LOW BLOOD PRESSURE

This is the condition which precedes tuberculosis, diabetes, cancer and all disorders where there is great enervation. In every case low blood pressure and enervation

precede the above mentioned diseases, and are not caused by them. With low blood pressure, the arteries become flabby and relaxed, and the muscles and tissues of the body are found to be in a similar state. Every cause which is weakening to the body may be responsible for the production of low blood pressure.

The cure consists in building up the blood stream and developing all the functional powers of the body. The extreme weakness will be gradually overcome by proper dietary changes, with the use of physical culture exercises and walking. Improvement, however, is very slow, and you must be patient and not easily discouraged if you expect to overcome this serious and dangerous condition. In the following case note the length of time necessary to effect a cure:—

CASE 17. Female, 38 years of age. Had been enervated for several years, but could not find anything to cure this condition. Upon examination I found her suffering from a real anemia, with 95 millimeters systolic blood pressure. The patient was put on a fruit fast consisting only of apples. Apples were eaten during the day as desired, and water was taken each time. The patient averaged only 6 or 8 apples daily, as this seemed to satisfy her craving for food. This fast was continued for a week, by which time the blood pressure tested 102 millimeters systolic, with an increase in hemoglobin and red blood corpuscles.

The patient was then put on the following diet:—

Breakfast—Bowl of whole wheat mush, made from coarse-grained entire whole wheat, soaked over night and cooked one hour, and seasoned with butter and cream, but no sugar.

1 Cooked, non-starchy vegetable, and raw celery or lettuce.

- Lunch— 2 Soft-boiled eggs.
3 Pieces of brown toast.
Dish of stewed prunes.
- Dinner— One of the following proteid foods: Lean beef
or mutton, chicken, turkey, fish, or Belgian
hare.
2 of the non-starchy cooked vegetables.
1 or more salad vegetables.
Stewed fruit or jello for dessert.

This patient was working in an office, and I thought it advisable that she should use the foods as prescribed, because it would be more convenient for her to get the egg and toast meal at a downtown restaurant than any of the others—that is to say I arranged the order of the meals in such a way as to cause the patient the minimum of inconvenience. She was instructed to exercise morning and night, and certain definite exercises were prescribed which she took at home. In addition to this I advised her to walk a mile each morning before going to the office; a mile at lunch hour; and a mile before dinner in the evening. This was gradually increased to two miles each time, and a walk added in the evening after dinner. I have found walking to be one of the best exercises for building up general strength, and of great value to anyone who is attempting to raise their blood pressure, as they will find that the strength of every part of the body is gradually increased in direct proportion as examination shows an increase in blood pressure.

The patient continued on this diet with slight variations, and the blood pressure gradually increased so that at the end of 3 months it was 110 millimeters systolic, at the end of 5 months 116 millimeters, and at the end of 9 months exactly 120 millimeters systolic, the normal pressure. In the exceptional case the blood pressure may be brought to normal in a shorter period of time, but the length of time required in the above case is typically true

of most of these cases. The patient has remained well in every way, with the blood pressure perfectly normal for over three years.

BRIGHT'S DISEASE

The function of the kidneys is to separate from the blood such waste material as can be excreted in liquid form. As a result of certain tissue changes, a great deal of the fine "ashes" resulting from the oxidation of dead cells is thrown out in the urine. The albumen in the body, however, should not be eliminated in this way, but because the liver is often very sluggish on account of overwork it becomes unable to take care of an ordinary amount of proteid food, and the kidneys consequently assist in the elimination. This sets up an inflammation of the lining membrane of the kidneys, and when such a condition begins the patient is in the first stages of Bright's Disease.

Contrary to popular belief and the opinion of most physicians, this throwing out of proteid in the urine and the resultant irritation produced, is not caused by ordinary meat eating; in fact the Salisbury meat diet is often advisable in the treatment of any stage of Bright's Disease.

The following causes may be considered as the most important in the production of this disease:—

First: Overeating of all kinds of food.

Second: Enervation or weakness brought on by overwork or destructive habits of thought.

Third: The use of an excess of sugars and starches in the diet.

Fourth: The use of inharmonious food combinations.

Fifth: Lack of sufficient exercise to take care of a normal amount of food, which should be converted into tissue.

Anyone suffering from this disease may have traces of albumen showing continually in the urine for several years before the kidneys are overworked enough for the patient to become conscious of any symptoms. The urine will gradually become cloudy and often scant, and there are other symptoms such as pain in the back over the region of the kidneys, although usually these will manifest themselves lower down in the spine because of the irritation produced in the bladder from this heavy, irritating urine.

The worst forms of Bright's Disease are those in which the blood pressure is high, but as the treatment of Bright's Disease and high blood pressure is practically the same, the patient may expect a cure from both disorders if proper treatment is started soon enough.

There is no disease which yields so readily to treatment by the fasting cure as this one, and even the most serious looking cases will often be cured in a remarkably short time. It is of course possible that the disease may have progressed so far as to produce structural changes in the kidneys from which these injured organs can never recover, but these cases are very rare, and if the patient is willing to follow strict habits of life, a complete cure can usually be effected.

A fairly long fast should be taken first of all, followed by an appropriate diet such as outlined in the case below. As the cure progresses the patient must be encouraged to take up light forms of exercise, gradually increasing the amount of calisthenics until able to go to a gymnasium for more vigorous kinds of exercise. From that time on, if the patient expects to remain well he must keep in

training almost as strictly as an athlete does, as by so doing the bodily forces will use up any reasonable amount of food that may be eaten, because of the stimulation of the functional powers, with a consequent calling upon the digestive organs for increased nourishment.

CASE 18. Man, 42 years of age. Upon examination his blood pressure was found to be 180 millimeters systolic, which is 60 millimeters above normal. Large amounts of albumen had been showing in the urine for several years, and he had been turned down for life insurance on two or three different occasions. He had learned to examine his own urine by boiling it in a test tube, and, after heating, the coagulated albumen was so heavy that it could not be poured out of the test tube. He had first been told of his condition by a physician eight years before, and the albumen had been gradually increasing since that time. During the eight years he had lived almost exclusively on a vegetarian diet, and he declared that he had probably not used more than 1 lb. of meat in the whole of that period.

I assured him that the inharmonious food mixtures he had been taking, and the excess of starchy food which nearly all vegetarians use, were probably mostly responsible for his disorder. At the time he came to me for treatment he was hardly able to attend to business, and felt that he had "reached the end of his rope" as he put it.

He was immediately started on a fast, using as many grapes as desired during the day, and being urged to drink large quantities of water. His method was to eat a handful of grapes whenever he felt like it at any time of day, limiting himself only to the extent of not taking more than 3 lbs. on any given day. The urine was examined every day for the first week, and on the fourth day of the fast was entirely clear of any signs of albu-

men. The grape fast, however, was continued in all for one week, at the end of which time the blood pressure had returned to the normal figure of 120 millimeters.

His fast was then changed to taking a glass of orange juice 3 times daily, with a glass of water each time. This was kept up for another week, and more for the sake of variety than anything else he was then put on an apple fast, using a small, juicy apple every two hours, together with a glass of water. This was continued for two weeks, so that altogether he fasted on fruit or fruit juice for 28 days. After the fourth day of his grape fast no further traces of albumen were again discovered in the urine.

In breaking his fast at the end of 28 days, the following diet was prescribed:—

Soup to be taken three times daily, made from the following vegetables: Spinach, asparagus, celery, parsley. These were ground together in a food grinder, and cooked for about two hours.

He was allowed to use as much of this as he desired 3 times a day, and encouraged to drink a large amount of water between these meals. This special diet was used for 4 days, after which time he was given the following:—

Breakfast—Whites of 3 eggs.

3 or 4 pieces of thin, dry, brown toast.

Dish of stewed fruit, selected from the following: Prunes, figs, raisins, dried apricots.

Lunch— 2 ounces of almond or Pecan nuts.

2 or 3 apples.

Dinner— One-half pound Salisbury steak.

2 non-starchy vegetables.

Choice of one or more salad vegetables.

Dessert: Every other day a dish of stewed fruit and on the alternate days a dish of jello, with whipped cream if desired.

During all of the diet treatment the patient was coming to my office every day for massage and electro-ther-

apy treatments, and continued to do so for several months, during which time the urine was watched carefully, and although it was heavy at times, consequent upon the overwork of the patient in looking after a neglected business, it never showed any signs of the presence of albumen.

This cure was effected more than 6 years ago, and the patient has remained in perfect health ever since, without any return of the high blood pressure. Of course he has followed his diet during these years, has learned more about selecting his food, and has never returned to his former habit of indiscriminate eating.

BRONCHITIS

The true cause of chronic inflammation of the lungs, commonly called bronchitis, is the irritation produced by toxic mucus being eliminated through the inside lining membrane of the lungs. This mucus condition is sometimes only on the main forked tubes that convey air from the windpipe to the lungs, but in the more advanced cases all the minute branches of the bronchia are involved, producing a state similar to tuberculosis, and this may exist for many years before changing into a serious acute form. If the patient's strength is maintained through the years, a fair age may be reached, with only the wretched symptom of constantly coughing up quantities of catarrhal phlegm, but the disease is easily cured by proper diet and by hygienic living.

This trouble is really nothing more or less than a catarrhal state of the lungs, and all mucus forming foods must be eliminated until the delicate membrane is restored to the normal, when it can again resume its work of expelling only gaseous poisons. A fast of several days will clear the lungs of accumulated material which has

been forming for many years, and if a suitable diet is continued after the fasting period a quick cure may be expected.

There are several factors connected with tuberculosis which are not present with bronchitis, and the cure is so much more rapid with the latter disease because the patient's strength is greater, and there is less tissue degeneration to be corrected.

As in catarrh of the nose and throat, the strictest diet must be maintained for a long time, because of the fact that the membrane has been literally soaked in mucus for years, and will tend to resume its former habit of eliminating toxins in a solid form unless the material for such poisons is withheld from the blood.

CASE 19. Man, 73 years of age. Had suffered from bronchitis for years. Believed also that he had asthma. I found that he had never suffered from the typical asthmatic wheezing, but that his lungs had always made a whistling sound because of the air passing through bronchial tubes covered with an excess accumulation of mucus. He had attempted to alleviate his condition for years by using asthma remedies, and by various changes of climate, but with very little effect. Large quantities of mucus were coughed up each morning, and during all the day, in fact so much during the day that he had had difficulty during his life in keeping a position, because everyone suspected that he had tuberculosis.

I assured him that his trouble was caused by a catarrhal blood stream, which was depositing its mucus and waste products in the lungs instead of in the usual eliminative channels, and that as soon as this excess was removed from the blood, he would become well. A fast of orange juice was used at first, the patient taking the juice as desired during the day, and drinking plenty of water each time the juice was taken. After 15 days of

this fast, a change was made to a fruit fast, and the patient used on successive days plums, grapes, and apricots, using only one fruit on each day, and keeping this up for 20 days more. Before this fruit fast was completed the mucus had entirely disappeared, and the patient was not raising any mucus in the morning except a very slight frothy material, which finally disappeared after several more weeks of a carefully selected diet, wherein the carbohydrate foods were used in only small quantities.

The patient took a daily treatment with the ultra-violet light applied to the membrane of the nose and throat, and this no doubt made his recovery more rapid than it would have been if he had been forced to use only home treatment. A salt glow was also recommended and used every other day during the course of treatment.

CASE 20. Girl, 8 years of age. Had suffered from bronchitis since a baby, coughing up each day quantities of mucus, and having a characteristic whistling sound in the lungs. She had never been able to play with other children because her breath was so short that she could not endure any long exertion without bringing on more whistling and great enervation. Tonsils and adenoids had been removed when 3 years of age, and to all appearances the bronchitis had been made worse following the operation. I believe this is usually the case when these organs are removed, if the patient's habits are not corrected to cure the catarrhal state responsible in the first place for the enlarged tonsils. It seems that more mucus forms in the lungs in every case after the tonsils have been removed.

After a 3-day fast on orange juice and water all signs of the bronchitis disappeared, and no traces have since been found of any catarrhal condition, as the child has been living since the fast upon practically a starch-free diet, using mostly proteid foods, with a large amount of

salad and green vegetables. She is now studying classical dancing, and able to do the hardest exercises without the slightest fatigue, and without producing any whistling or wheezing in the lungs.

CATARRH AND HAY FEVER

These disorders of the mucous membrane of the nose and throat are really of constitutional origin, and due to the discharge of mucus from a blood stream surcharged with the products of an excess assimilation of fatty and carbohydrate foods. Because of the inability of the eliminative organs to throw off this excess mucus, it is discharged through the mucous membranes, which, in turn, become irritated and develop a chronic state of engorgement and inflammation. The invasion of bacteria, or breathing of an excess of dust or flower pollen, will easily bring on an acute attack, because of the congestion of serum already there. In order to bring about a cure, it is first advisable to cleanse the blood of this excess of accumulated toxic material as rapidly as possible, and adopt a diet free from those foods which furnished the material for the catarrhal phlegm.

There will always be noted a derangement of the digestive functions accompanying these troubles, together with a torpid liver and a sluggish circulation, and these conditions must be corrected to bring about a complete and permanent cure.

CASE 21. Married woman, 40 years of age. Had suffered from catarrh all her life, with hay fever during the months of May, June, and July of each year. She came to my office at the start of one of her hay fever attacks three years ago, in the month of May. Her eyes and nose were red, and she was forced to wipe them al-

most constantly. She sneezed so violently and often that it was impossible for her to go out much in public.

A fast was started, using only plain water, and drinking a glass every half hour during the entire day. No fruit juices were used in this fast, as I find they frequently produce irritation in anyone suffering from hay fever, and although the fruit fast will sometimes have beneficial effects, my experience is that every case responds to the plain water fast.

The fast was continued for 9 days. On the second day the sneezing stopped, and at about the sixth day all signs of hay fever had disappeared. The patient received daily treatment with concentrated radiations from the ultra-violet light, as produced through the quartz mercury vapor lamp, and this no doubt hastened the cure. I suggested that the patient drive out into the country and walk through the hay fields, in order to convince her that the cure had been made through a cleansing of the blood stream, and that if she remained in a condition free from catarrh, she need never fear any slight irritation which might be produced by the smell of hay or the pollen of plants. She has remained well, and without a sign of hay fever, during three seasons, and seems to be completely cured.

CASE 22. Female, 34 years of age. As I am writing this article in the month of August, I feel it might be helpful to my readers to report a case recently called to my attention. This patient had been under treatment the previous fall for stomach ulcer, which had been cured by the adoption of a strict dietetic regime, and the patient restored to good health in about three months after starting the treatment. It had been over six months since I had seen her, but she came to my office a few days before this article was written and reported to me that

she had had no signs of the hay fever this year which she had had every year since a small child. She had forgotten to tell me about this at the time her case was diagnosed, but thought it might be interesting to me to know that the general good health which had resulted from the adoption of correct habits of life had cured her hay fever, even although I was not already aware that she suffered from that disease.

By profession she was an actress, and during some years the hay fever had been so troublesome that she was forced to cancel theatrical engagements, simply because she could not go through a performance without sneezing many times. I report this case because it proves my contention that hay fever is a constitutional disease, and the cure does not depend upon local treatments to the membrane of the nose and throat.

CIRCULATION—DEFECTIVE

Good circulation of pure blood is absolutely necessary for the enjoyment of perfect health; indeed, the wonderful mechanism of the human body may be deprived of life altogether and the blood emptied by a single dagger thrust. The cells of the body are literally floating in a sea of blood. Circulation varies in different parts of the body, and even in good health there is a very marked difference in the rapidity of the flow in the various portions of the anatomy.

It is the popular belief that the blood is pumped from the heart to all parts of the body and returns again to the heart, completing the circuit in about four minutes. I do not believe this to be entirely true, as my investigation has shown that only waves of blood are sent out by the heart into the circulation, and that these waves partially purify the blood as they pass along, forcing the

older, devitalized blood back through the venous circulation to the heart and lungs to be re-oxygenated.

In some parts the blood becomes thickened with the waste products of the tissues. If a complete stoppage exists, caused by a blood clot, it may cause instant death if it occurs in the heart or brain. When a chronic partial stoppage exists in any part, it produces slow death of that part. If the hands or feet are cold under ordinary conditions, you may rest assured your circulation is defective. Lowered vitality will produce defective functioning of the heart, or any part of the circulatory system.

The heart must be considered as an organ for the control of the circulation, and any organic or functional disorder of that organ will be the cause of poor circulation. If the valves of the heart allow the blood to leak back, the action of the heart will be increased, but even this extra rapid action of the heart will not overcome the sluggish circulation in the extremities of the body. Dropsy is a state often produced when the blood or other fluids of the body become congested in the feet and hands, because of a lack of muscular tone in the walls of the arteries and veins. A poor circulation below the waist is often caused by tight corsets, belts, or garters, and tight neckbands will cause a slowing up of the circulation in the neck and face, and produce puffy face and double chin. Tight hatbands cut off the circulation to and from the scalp, and constitute a common cause of baldness.

The first change to be considered in bringing about a cure is to see that the thickened blood is reduced to normal. This is best accomplished by fasting for a few days, which will give the body a chance to remove the foreign substances from the blood. This should be followed by careful dieting during the time that other methods of treatment are being put into use. Cold baths in the form

of shower or sponge baths should be taken twice daily. In some cases it seems advantageous to lie for three or four minutes in a tub of cold water.

If local congestion of the circulation exists, such as in blood poisoning in the foot, where immediate help is necessary, it will be advisable to use a hot bath on that part where the blood is stagnating, but this should only be taken as an emergency treatment, and not for those who have a chronic condition of sluggish circulation, as the hot bath is always relaxing, and makes the blood vessels lose their muscular tone. Friction rubs with either a cold wet towel or a dry towel are recommended for increasing the activity of the pores and the skin circulation. Sleep with a small amount of covering over the body, and use a hot water bottle for the feet.

No permanent cure of any form of defective circulation is possible without an increased amount of muscular exercise. This may be taken in the form of calisthenics, but the best single exercise of all for this trouble is walking. Walks should be taken several times daily, increasing the length of the walk gradually as the strength permits.

CASE 23. Female, 30 years of age. Examination disclosed a slight valvular leakage of the heart, with a low blood pressure. The hands and feet had a purplish, mottled aspect. Patient complained of great weakness, and constant numbness of the hands and feet. A water fast was advised, which the patient at once started, using only water for 4 days, and following this by an exclusive milk diet. At the start of the milk diet the patient had an 8 oz. glass of milk every hour during the day, until 3 quarts were taken. This was raw, unpasteurized milk from Holstein cows. Each glass of milk was preceded by a teaspoonful of orange juice. No other food or liquid of any other kind was used.

At the end of three weeks of this diet, the patient's heart valves were functioning normally, and no sign of valvular leakage existed. The circulation had improved in the hands and feet, so that they seemed quite normal. The patient was then put on a general diet regime, using well-balanced combinations of food, and started systematic exercising, using calisthenics twice daily and taking long walks. During the milk diet the patient was allowed to exercise as much as was needful in the performance of necessary housework, but vigorous exercising was not started until after the milk diet was completed. A gradual gain in weight was shown, and at the present time the patient weighs about 15 lbs. more than at the start of the treatment. She is feeling well, and seems to be in perfect health.

CONSTIPATION

This is probably one of the most common complaints of the present day, and may be said to be entirely an ailment of civilization. It is present in most diseases, and is an important causative factor always to be considered in the cure of any specific trouble. Women are much more subject to the disorder than men, because of their comparative inactivity, and the weakness of their abdominal muscles. The constriction of tight corsets and clothing is a cause common with women, and those of this sex whose abdominal muscles are weak usually suffer from prolapsus of the stomach and intestines, which condition is a potent cause of constipation.

In constipation the feces are generally too dry for want of sufficient lubricating fluids from the intestines, and it will be found that the kidneys are eliminating a large amount of liquid which would soften the feces if it could be used in the intestines. I believe that the free

drinking of liquids has a tendency to cause constipation rather than to cure it as is commonly believed.

The most frequent causes of constipation are the following:—

1. Waiting for some uncomfortable sign that the bowels wish to move, in place of going to the toilet at certain fixed and regular times.
2. Insufficient exercise.
3. Long continued use of laxative medicines.
4. The use of food which is especially constipating, such as milk, cheese, starches, and sweets.
5. Lack of green non-starchy vegetables in the diet, to provide bulk.
6. Insufficient mastication of starchy foods.
7. Inharmonious mixtures of foodstuffs.

No matter what the cause of constipation may have been, it always seems advisable at the beginning of the cure to cleanse the entire alimentary canal completely by fasting and enemas. The fast with various kinds of fruit seems to be the one most successful in the treatment of constipation, and the following fruits are found to be the best to use for this kind of fast:—

Apples
Grapes
Peaches
Apricots
Plums
Ripe Figs
Tomatoes (which are
really a fruit)

The whole fruit should be used, and the skin should never be removed from any of them. It is sometimes found advisable to remove the skins of peaches and figs when they are used with other foods, but this does not hold good during the fast, when the skin furnishes bulk which is needed.

One of these fruits should be taken for several days, or a different fruit on each day, according to the desire of the patient. I generally recommend the use of agar-agar with this fruit fast, and have the patient take a teaspoonful of the granulated form several times daily. This provides more bulk, and gives the intestines material to aid in the elimination of accumulated toxic material from the colon.

At least two enemas daily should be used during the fruit fast, and this fast should be continued for several weeks. After the fast is completed the patient is put on a diet free from those foods which are constipating, rather a full diet being employed, and as large a use as possible made of greens and non-starchy vegetables. Meat may be freely used if taken with sufficient greens. It is advisable for some time to keep down the amount of starch, and to eliminate milk from the diet altogether. Muffins made from real whole-wheat flour are helpful, if they are used in the right combination with other foods.

After eating is resumed the enemas should be taken only once daily, and that one taken by the patient while sitting on the toilet, allowing a small amount of water to run in and out of the rectum, which will be sufficient to encourage the start of the bowel movement. It is absolutely necessary to go to the toilet twice daily whether the impulse to do so is felt or not. You will find it helpful to put the feet on the rung of a chair placed in front of the toilet, so that you are sitting in practically a squatting position—this being the posture adopted by many of the native peoples of the Orient. Whether you are troubled with constipation or not you will find that this will give you more satisfactory bowel movements.

If fruit is desired, it may be taken before retiring, and this will aid in overcoming constipation. Only one

fruit at a time should be used. Avoid laxatives and cathartics of every description, as they tend to deplete the intestines of their lubricating fluids, with the result that when they are not used the feces become dry. The most helpful exercises for constipation are those taken lying on the back, or what may be truly called "setting-up" exercises. Long walks are specially recommended, and are of more direct benefit in overcoming constipation than with almost any other form of ailment.

CASE 24. Woman, 67 years of age. Had been in good health for about 30 years, but previous to that time had been sick with many different ailments. At 37 years of age she discovered the beneficial effect of enemas, and started taking one each day, using an ordinary fountain syringe, and sitting on the toilet while taking it. She quickly got rid of her rheumatism and other troubles which she had at that time, and continued taking one enema daily until the time she presented herself to me for treatment, remaining in perfect health during all the thirty years.

She came to me because of an accident which had injured her spine, and told me of her experience with the enema. As I do not treat patients even with a broken bone without putting them on a well-balanced diet, I did the same in the case of this patient, and had her discontinue the enema. To her surprise she found that her bowels would move two or three times daily. This case clearly shows that the long continued use of the enema does not "paralyze" the action of the intestines as is claimed by many authorities.

CASE 25. Female, 37 years of age. Constipated since a little girl. Had had many bilious attacks, also rheumatism and frequent headaches. Bowels never moved without a laxative. On a number of occasions she had waited

several days for a movement to start, but without result, and finally she would have to resort to some strong laxative.

The patient was put on an apple fast for 35 days, eating a medium sized apple every two hours during the day, and drinking a glass of water each time. Two enemmas daily were taken. The bilious symptoms and headaches entirely disappeared during the first week of this fast, and by the end of the second week the rheumatism had entirely left her. After 35 days of this diet the patient was put on a diet of the following:—

Breakfast—1 Dish of whole wheat mush made from entire coarse-grained whole wheat, seasoned with butter or cream. No sugar.

Lunch— 2 Cooked non-starchy vegetables.
Salad of several non-starchy salad vegetables.

Dinner— 1 of the following proteids: Lean beef or mutton, chicken, Belgian hare, or fish.
2 non-starchy vegetables, and choice of one or more salad vegetables.
Dish of stewed fruit for dessert, selected from the following dried fruits: Prunes, figs, raisins, apricots.

The enema was continued once daily for a week, and was taken during that time while sitting on the toilet. By the end of the first week of this treatment the bowels moved freely by themselves, and there has been no return of constipation since. The patient has gradually changed her diet, so that she is now using almost every kind of food, but combining it properly, and using an extra amount of bulky, non-starchy and salad vegetables. There has been no return of the headaches or rheumatism or any of the other symptoms from which she had been suffering.

DEAFNESS

An interference with the sense of hearing may be caused by a retention of wax in the outer ear. This may be removed by soaking the entire external canal in warm olive oil, which can be poured in while lying on the side. Allow the oil to remain for several minutes, and repeat this for a number of days, when the wax can be easily removed with a small ear spoon.

A common cause of deafness is a chronic state of enlargement of the tonsils. (See article on Tonsillitis.) Of course an injury to the ear may cause a complete deafness which cannot be cured by any means, as a broken ear drum cannot be replaced. The most common cause is no doubt a catarrhal state of the nose and throat, and if this is the real cause the cure is certain as soon as the catarrh is treated and disposed of. (See treatment under article on Catarrh and Hay Fever.)

The following two cases are typical:—

CASE 26. Male, 65 years of age. This patient was a retired physician who had been totally deaf for about 10 years. He came to me in the hope that I might be able to give him a diet which would relieve the catarrhal condition in his head and throat which had existed all his life. He remembered having catarrh as a boy, and was never entirely free from it at any time, but in spite of all the treatments he took in his endeavors to overcome the trouble, it gradually increased through the years, so that when he presented himself to me for treatment he was using several handkerchiefs daily. He gradually became deaf during the years of his practice, and the last few years had been spent as a specialist on a certain branch of medical science where acute hearing was not essential. After becoming totally deaf he found it hard to continue his practice at all and consequently retired from it altogether.

I explained the benefit of the fasting cure for his catarrhal condition, and suggested that his hearing might be regained. Of course he did not believe this, after eminent specialists had failed to help him. He started on an orange juice fast to rid his system of catarrh. During the fast he used only the juice of 6 oranges daily, one taken every two hours with a plentiful supply of water. The fast was continued for 25 days. After the tenth day certain loud noises could be heard. His hearing continued to improve, and on the eighteenth day of the fast he passed the test used for railway trainmen, and could hear a watch tick 18 inches from either ear.

At the end of 25 days he was placed for a further 10 days upon the following diet:—

Three times a day soup made from the following vegetables: Celery, asparagus, parsley, spinach. These were ground together in the raw state and then cooked for over an hour. After the cooking was completed he was allowed to add a small amount of butter and salt for seasoning. One or two bowls of this mixture were taken three times daily during the ten days, and then the following diet was taken for several months:—

Breakfast—Whites of 3 eggs.

3 or 4 pieces of thin, brown, dry toast.

Dish of stewed fruit, selected from the following: Figs, dates, raisins, apples.

Lunch— A raw food meal, using a choice of the following: Spinach, lettuce, string beans, carrots, turnips, asparagus, parsley, oyster plant, parsnips, beets.

Dinner— Roast beef or beefsteak.

2 non-starchy cooked vegetables.

Choice of the following salad vegetables: Lettuce, tomatoes, cucumbers, celery.

No dessert.

After several months of this diet the patient was allowed to make other changes in his diet, being careful to avoid inharmonious food mixtures, and cautioned to use a small amount of fats and starches. The cure was completed several years ago, and from time to time I have heard from the doctor, who has resumed practice, and has had no return of catarrhal symptoms or deafness.

CASE 27. Boy, 4 years of age. Came to my office with his mother and small brother 2 years of age. The mother brought the 2-year-old baby to my office to be treated for enlarged tonsils, because she wished to avoid an operation, believing that a previous one was responsible for the older boy's deafness. The operation had been performed two years before, and there had been a gradual increase in deafness since that time.

I assured her that if the older child took the same diet treatment as the baby was to take to cure the enlarged tonsils, his hearing would be improved. The younger child started treatments both constitutional and local, and the tonsils were reduced to normal size. At the same time the older boy followed the diet of the younger, and without any local treatments or any special advice, his hearing was completely restored. It has remained perfect ever since that time, which is now about a year ago. Apparently some injury had been caused, in the course of the operation, to the Eustachian tube—the air tube leading from the throat to the ear. I assume that the fast absorbed the scar tissue produced by the injury, or perhaps it was only because his chronic state of catarrh was removed.

DIABETES

This disease is present only with those patients who are so enervated that their metabolism becomes faulty, that is, their cells are literally dying faster than they are

being built up. It is not essentially a kidney disease, but one evidence of the disorder is the elimination by the urine of large quantities of sugar. The patient generally voids a large quantity of urine during the 24 hours, and has to urinate frequently. In every case the sugar in the urine is caused by the liver's inability to take care of the sugar and starch assimilated.

From this point of view you will see that the kidneys are really saving the life of the patient by throwing out the waste sugar which the body cannot use, because the liver cannot do the extra work it has been called upon to do. Often the appetite will be enormous, and the trouble is more liable to occur in those people with a tendency to obesity. The saliva is usually scanty, and often sores will form in the mouth. There will be a strong thirst, and the patient will want to drink large quantities of water. The breath has a peculiar smell similar to ether, caused by the acetone which is being eliminated by the breath. Men are more susceptible to the disease than women.

Anything which produces enervation and makes the body lose its resistance to disease may have an effect in producing diabetes — mental shocks, nervous strains, overwork, worry, anxiety, all have a tendency to favor the development of this affliction. Autointoxication is always present, and the cure of this condition of self-poisoning is always necessary before the diabetes itself can be tackled. A tendency to derangement of the pancreas and liver always exists, with functional impairment of the liver and clogging up of bile in the gall bladder.

In spite of the seriousness of this disease, it is easily curable in the case of middle-aged patients. The younger the patient is the more difficult the cure, because if the metabolism is imperfect at an early age it shows a radical functional impairment of the liver and pan-

creas, while with those of more advanced age a certain amount of lost resistance may be expected.

The start of the treatment of diabetes depends upon a treatment for the liver and gall bladder such as I recommend in the articles written about diseases of those organs. It is advisable the first night to take 4 ounces of olive oil together with 4 ounces of grapefruit juice, just before retiring, and beginning next morning to take the juice of a grapefruit every 3 hours during the day, and drink large quantities of water with the juice. The sugar in the urine will usually disappear after a few days of this fast, and will not again reappear, if the patient will rigidly follow such instructions as are outlined in the cases cited below.

Following the fast, a milk diet is generally of benefit, but not over three or four quarts should be taken each day, and it is always necessary to use the juice of lemons or oranges with this diet, in order to stimulate the flow of bile properly so that the patient will not become bilious. Exercise should be gradually increased as the sugar leaves the urine, but proper periods of rest taken during the day, and the patient must sleep as long as possible at night. Any mental causes which are responsible for the patient's loss of energy must be removed, that is to say, helpful, happy, healthy thoughts must be substituted for those which were causing depression and enervation.

CASE 28. Male, 54 years of age. Examination showed a large amount of sugar in the urine. The patient had been unable to work in his office as an attorney for some time. Systolic blood pressure was only 95 millimeters. The grapefruit juice and olive oil treatment was administered the first night, followed by a fast of grapefruit juice. This was continued for 12 days. On the third day of the fast all traces of sugar had disappeared from the

urine, but the fast was kept up for another nine days, and the patient was then given a milk diet, using a glass of milk every hour until three quarts had been taken. Each glass was preceded by a teaspoonful of lemon juice.

This milk diet was continued for over three months. The patient was then put on a diet of the following:—

- | | |
|------------|---|
| Breakfast— | Whites of 3 eggs.
3 pieces brown, thin toast.
Choice of stewed fruits. |
| Lunch— | Choice of one of the following fruits: Apples,
pears, grapes, ripe figs, peaches, apricots,
plums, or a glass of orange juice.
Glass of water added. |
| Dinner— | Three-fourths pound Salisbury steak.
2 non-starchy vegetables.
Choice of several salad vegetables.
No dessert. |

He kept to this diet for about three months and then gradually introduced other articles of food, so that now he is taking almost any eatable he desires, but using it in proper proportion and combination with other foods. Many examinations of the urine have been made in this time, without a trace of sugar being found. He has now resumed his law practice, and is apparently in perfect health, has a normal blood pressure of 120 millimeters systolic, and abundant energy for his work.

DIGESTIVE DISORDERS

In health, the digestive functions are carried on without pain. A healthy person is not aware of the work being done by his stomach and intestines. The first symptoms of digestive disorders are a feeling of either weight, oppression, distension, flatulence, palpitation, or various other unpleasant symptoms which are generally included under the term “indigestion.” If the cause of these symptoms is not removed, the next step will be the devel-

opment of gastric ulcers, enteritis (irritation of the small intestines), or colitis (inflammation of the colon). One of the most common indications of abuse of the digestive functions is the universal symptom of constipation or impacted colon.

Among the manifold causes of digestive disorders are the following:

1. The use of indigestible foods and those whose very composition proves them unsuitable for use as food by the laws of physiological chemistry, such as: onions, garlic, dry beans, flapjacks, cabbage, cakes and pastries, bananas, and all mixed condiments. Remember your experiences with those foods and place them in the "taboo" class in spite of the recommendation of so-called authorities whose judgment is often impaired by their own appetites.

2. The use of inharmonious combinations of foods whose chemical mixture make them undergo excessive fermentative processes. (See chapter on Food Combinations.)

3. Overeating of the best food properly combined will be a source of digestive disturbances both of an acute and chronic nature.

4. Eating when your system is exhausted or when you have insufficient hunger.

5. Mental disturbances, such as worry, hate, fear, jealousy, etc., waste an enormous amount of energy which might be used to better advantage in digesting and assimilating food.

6. Insufficient mastication, especially of starchy foods.

7. The use of too much liquid at the meals, whether it be coffee or water, will over-distend the stomach and weaken the gastric juices.

8. Injuring the stomach or intestines with strong drugs which results in the destruction of the delicate lining of these organs.

9. Irregularity of meals.

Those who have not reached the chronic stage of a disease of the digestive organs will find that by substituting good habits of eating for harmful ones the results which quickly follow will be astounding. However, a short fast is a good preparation for any radical change in the dietary regime, and is necessary in advanced cases in order to ensure rapid benefit from the treatment.

The following ailments will cover the typical varieties of gastro-intestinal diseases met with in my office practice:—

GASTRITIS. The word “gastritis” means an inflammation of the gastric organ or stomach, and is probably the most common form of trouble with the digestive apparatus. Mild forms of gastritis will be noticed in those who find they have a gnawing in the stomach when they miss a meal. This gnawing is never an indication of hunger, but shows that the walls of the stomach are sufficiently inflamed to irritate each other when the stomach is empty. If dietetic errors are not corrected this gnawing becomes more pronounced, and more of a burning feeling is felt three or four hours after meals, caused by the irritating effect upon the inflamed membrane of an excess of gastric juice left in the stomach after the digestion of the last meal.

This gnawing or burning may exist for many years before the patient will think it serious enough to consult a physician, as drinking a glass or two of water or eating a small amount of food will generally relieve any of the gastritis symptoms. As soon as the stomach is distended by water the irritation will cease, or if a small

amount of food is eaten, the gastric juice, which is acid, will have food material to work upon, and the lining of the stomach will not be so irritated. The sooner this irritation appears after a meal the more serious is the form of gastritis present, and if the treatment of this disorder is neglected it will eventually turn into ulcer or cancer.

CASE 29. Woman, 32 years of age. Was troubled with a large amount of stomach gas, and a feeling of discomfort about two hours after each meal. Had been told by a diagnosing physician that she had a stomach ulcer and must be operated on at once, but she came to me for advice because she hoped to avoid an operation.

Patient was put on a plain water fast for five days, using water as desired any time during the day. During this time she suffered no discomfort and lost all her former symptoms. If a real stomach ulcer had existed, this change would not have taken place so rapidly. After the fifth day the patient was put on a milk diet, using at first three quarts of pure unpasteurized Holstein milk, and taking four ounces of milk every thirty minutes until three quarts were taken. No other food was used, and no water was drunk during the course of the milk diet. This diet was continued for about four weeks, after which time the patient was put on a general diet, using well-proportioned meals with correct combinations of food, and has since suffered no symptoms of gastritis or any digestive disorder.

STOMACH ULCER. This is a condition present only with those who have suffered for years with gastritis, and who have neglected to change their dietetic habits so as to cure the inflammation of the stomach which must exist before an ulcer can start. The red, inflamed lining of the stomach which is present in gastritis becomes more

irritated around the pylorus or exit from the organ, and an ulcer gradually starts which proceeds rapidly to penetrate through the stomach once it has made a proper beginning. When any ordinary article of food is eaten it will cause great pain and finally vomiting. In the worst stage of the ulcer, blood and pus will be vomited along with any food material which the patient attempts to eat.

Sometimes cow's milk can be retained if milk of magnesia is added to it to counteract the stomach's acidity, but the treatment which is the best at the start of such a case is to use an alkaline water fast, drinking a glass of water every thirty minutes, to which has been added a small amount of milk of magnesia or baking soda. Sometimes it is necessary to drink this alkaline water during the night, so that the stomach never at any time becomes empty, or in such a condition that the gastric juice might irritate it further.

After a few days of this regime, with the patient having complete rest in bed, a suitable milk diet should be used for several weeks. As soon as the acute symptoms subside, the patient should be encouraged to leave the bed and walk as much as possible, taking care not to bring on further irritation of the stomach by any too violent exercise. You may expect two to three months to elapse before the stomach is sufficiently healed to adopt a general diet regime, but by the time this is taken the patient must be thoroughly familiar with the changes necessary in his dietetic habits from those he practised before the ulcer was developed.

CASE 30. Young man, 26 years of age. Had been vomiting for several days all the different food preparations which his physician had been advising him to eat, and on the day I was called in on the case he had had several vomitings with blood and pus mixed in with the

food stuff. Had been suffering every hour of the day except the time he was under an opiate.

I advised an immediate enema, and instructed that this be used three times daily. The patient was given a pint of warm water to drink, in which had been dissolved a teaspoonful of baking soda. This was immediately vomited, bringing with it the remainder of some malted milk mixture which he had taken an hour previously. He was immediately given another pint of hot water with a teaspoonful of soda in it, and he succeeded in keeping this in his stomach. After ten or fifteen minutes the abdominal muscles lost their tenseness, and he became quite comfortable. A glass of hot water was given him every thirty minutes, with a very small amount of milk of magnesia or bicarbonate of soda in each glass. The painful symptoms entirely disappeared, and he was kept on this water fast for ten days, being awakened sufficiently every hour at night to take a pint of water.

At the end of this ten days he was placed upon a milk diet, taking four ounces of milk every half hour during his waking hours, and being aroused every hour during the night and given eight ounces. After a few days it became apparent that the night feeding was unnecessary, and his milk diet was changed to taking six ounces of milk every thirty minutes during the day. By this time he was able to leave his bed and take short walks.

This last change in the milk diet was continued for six weeks. He was then placed upon the following diet:—

Breakfast—French omelet. (See chapter on Proteid Food.)

3 slices of thin brown toast, moistened with hot water, and seasoned with butter or cream.

Prune whip, made by mincing stewed prunes and beating them up with the white of an egg, no other sugar being added.

- Lunch— A quart of raw milk taken 8 ounces at a time every 15 minutes.
- Dinner— Whites of 3 eggs prepared by mixing with 3 tablespoonfuls of water, and beating in a dry pan over a slow fire until cooked to a jelly-like consistency.
- Dish of 1 cooked non-starchy vegetable prepared by grinding in a food grinder before cooking, to ensure that it is well minced.
- Choice of one of the following raw salad vegetables, ground through a food chopper: Spinach, celery, or lettuce.
- Dish of jello.

This diet was continued for another month, and after that the patient was instructed to adopt a general diet, being careful to avoid all inharmonious food mixtures, and to follow the dietetic rules explained in the last part of this book. He has remained in perfect health ever since, and has never had a return of any digestive disorder.

ECZEMA AND PSORIASIS

These diseases are due to irritants in the fluids of the body which seek an outlet through the skin and mucous membranes.

Eczema is characterized by extreme itching, making it a very discomforting and irritating disease. The skin is scaly and generally exudes a serum, making an additional danger of easy infection from outside bacteria. I have had many very serious cases of infection starting with eczema which was poisoned by scratching bacteria into the irritated skin, thus setting up a state of acute septicaemia.

The potent causes in the diet are an excess of all starches and sugar, and their use in improper combinations with other food, such as acid fruits. Buckwheat

and oatmeal are particularly irritating to the digestive tract and skin, and must be entirely eliminated from the dietary.

Psoriasis is similar to eczema, but occurs mostly on the skin where there is hair growing. White mother-of-pearl scales form with a red base, but there is no itching as in eczema. The causes of psoriasis are identically the same as in eczema, and the cure depends upon the same treatment. The hair will come out in patches if this disease is not arrested quickly, and for that reason I urge you to cut the hair short and use the ultra-violet ray treatment as soon as possible, or at least use sun-bathing on the affected parts. The action of the sun is slower, and it is imperative that you cut the hair short or shave the part, so the actinic rays of the sun can reach it, as they do not penetrate the hair, but must strike directly against the skin. This local treatment will get wonderfully quick results, but the disease is never cured until the systemic causes are removed.

CASE 31. Boy, 8 years of age. Had suffered with eczema since a few days after birth. Had been treated by many physicians, and many patent medicines and salves had been employed with absolutely no effect. The physicians who examined and treated the case said they had never encountered a more stubborn one.

A water fast was used for four days. Three times daily a teaspoonful of common baking soda was added to the water, so that the boy had what might be called an alkaline water fast. At the end of that time all itching had disappeared, and the skin was almost entirely clear. The child was put on a well-balanced diet, avoiding antagonistic mixtures of food, but using almost every kind of food in season, and in perfectly proportioned combinations. This cure was effected over six years ago, and

there has been no return of any symptom of eczema since that time.

CASE 32. Man, 35 years of age. Had had psoriasis since a small boy. All of the hair on the body had been removed by the disease, and it was at this time extending rapidly through the hair on the head. I advised clipping the hair close to the skull so that powerful radiations from the ultra-violet light could be thrown against the scalp. A straight water fast was used for thirty-two days, and at the end of that time the skin was almost entirely clear. Some scaly traces remained which were eventually removed by further application of ultra-violet light therapy.

The patient was a small man weighing 125 pounds and worked constantly during the fast in a machine shop, doing hard manual labor. He now has a luxuriant growth of hair, without any sign of a return of any skin disorder. The hair which had been destroyed on the body has not grown in again, as no doubt the roots were killed during the long continuance of the disease. He is now using a well-balanced diet, without avoiding any particular article of food except those which are always tabooed by me as unfit for use by anyone. He has remained cured for over four years.

EPILEPSY

The principal cause of this serious affliction is a certain peculiar toxemia produced by decomposition and fermentation in the colon. Other contributing causes are a contracted rectum, intestinal worms, a long prepuce or foreskin in the male, or too large vaginal labia in the female.

These contributing causes should be removed in every case to assure a complete cure; but the dietetic manage-

ment of the case is the most important, and no permanent cure can be expected unless the alimentary canal is kept free from poisons. This disease is usually chronic in nature, and very stubborn in most cases, but a cure may be looked for if the strictest regime is followed faithfully and long enough to cleanse the system entirely from the virulent toxemia which is responsible for the disorder.

A quick cure is generally achieved if a long fast is adhered to, until normal hunger asserts itself, and the tongue becomes pink and clean. Sometimes the seizures will occur more often than usual at the start of the fast, and this may be regarded as a good sign that the poisons are being stirred up by the systemic house-cleaning. Often after several days of violent and repeated spells they will stop entirely, and no more will occur if the fast is continued, and is afterwards followed by a suitable diet. If the fast does not bring on more spells than usual the cure will be slower, and occasional attacks may be expected, which will be further and further apart, until they cease altogether.

After the cure the patient must be content not to overeat, and the bowels must be kept freely open. Rectal dilation is always advisable, and this treatment may be easily used at home. The dilation should last ten minutes, and be used twice daily. For some time after the cure seems certain, two enemas daily should be taken, with one quart of warm water each time, in the knee-chest position.

CASE 33. Man, 32 years of age. Had been a Seventh Day Adventist, and lived on a strict vegetarian diet all his life. Epileptic seizures started when he was 24 years of age, and continued at irregular periods for six years until he came to me as a patient. His residence was in another town, and he thought he could not stay in Los Angeles for treatment. He was therefore put upon a diet

regime and advised to follow that strictly, in order to see if a cure could be effected without a fast being resorted to. However in a short time he suffered another epileptic seizure, and returned to Los Angeles and started a fast under my directions.

The patient was put on a fast of grapefruit juice, using the juice of one grapefruit every two hours during the day, combined with a glass of water. The first night of this fast four ounces of olive oil and four ounces of grapefruit juice were taken together just before retiring, in order to stimulate the action of the liver and gall bladder. This fast was taken for fourteen days. No attack occurred during this period, and the following diet was taken at the end of the fourteen days:—

- Breakfast—2 coddled eggs.
2 pieces hard, dry, brown toast.
1 dish cooked apple sauce without sugar.
- Lunch—2 raw apples with 1 ounce of either pecan or almond nuts, together with a glass of water.
- Dinner—1 Small piece of broiled steak.
1 dish of spinach.
Raw celery.
1 dish cooked prunes (without sugar).

This diet was taken for two days, after which the dinner was changed to the following:—

- Dinner—Choice of one of the following: Lean beef, mutton, chicken, turkey, Belgian hare, fish.
Choice of 2 of the following cooked vegetables: Celery, asparagus, spinach, Swiss chard, summer squash, small green string beans, kale, lettuce, chayotes, oyster plant, beet tops, French artichoke, mustard greens, turnip tops.
Raw celery as much as desired.
Choice of the following cooked fruits: Prunes, pears, apricots, figs, raisins, apple sauce or baked apple.

Vigorous exercises were recommended morning and night, and long walks advised. The patient has remained in perfect health since that time, and has had no return of epilepsy. I am citing this case in support of my contention that epilepsy is not caused by a meat diet, but is always produced by a toxemia originating in the large colon from the fermentation of different foods, and more especially from starches and sugars. Other diseases of course may be produced by excessive meat eating, especially if meat is used in wrong combination with other foods, yet I do not believe it is a factor to be considered in the cause of epilepsy. After health is restored to the normal, nuts and cheese may be substituted for meat by those who have a religious or ethical objection to the use of fleshy foods.

FEMALE GENITAL DERANGEMENTS

There is undoubtedly no class of disorder which has so far-reaching an effect upon the nervous system as derangement of the genital organs. Our teaching upon the cause of these disorders in the past has been very limited owing to the hypocritical restriction upon anything which treated of the sexual life; but the dawn of a new age is breaking, when knowledge will dispel ignorance and we will be ashamed of what we so often called innocence. A veritable tidal wave of thought upon these subjects is sweeping the world and we may look for more true teachings in the next few years than in the entire historical period of mankind.

In such a necessarily short treatise I feel compelled to present to you those factors which have more particularly to do with Dietotherapy, and to mention only such other important causes as I hope to elaborate in future writings.

Chief among the irritating sources of genital derangements are the following:—

1st. A sluggish state of the blood stream through being surcharged with heavy foreign material which is productive of congestion in the womb and ovaries, and creates an engorged state which interferes with the normal functioning of these organs.

2nd. The pressure of prolapsed abdominal viscera upon the reproductive organs and the distension and irritation of intestinal gas.

3rd. Repression of the normal sexual instinct and function through psychological resistance, physical malformation, or misplaced position of organs.

In each individual case you may look for one or more of the above causes, which must be removed if the patient is to enjoy perfect health. The digestive disorders may be corrected through proper attention to necessary dietary changes, and the prolapsus caused by weakened muscles of the abdomen may be overcome through development of muscular tone by selected exercises. The deeper psychological factors so productive of harm through interference with the normal expression of sexual life are the causes most difficult to deal with, and often must be supplanted by suitable physical measures to bring about the removal of the unnatural accumulation of stagnant blood until a more natural sexual attitude is adopted.

PAINFUL MENSTRUATION. The menstrual life of woman is as varied as climate and racial development. Among all the primitive races the act of menstruation is performed without discomfort, and has as its object the ejection of an unfertile egg of microscopic size, which requires very little fluid or effort, and often only a thin transparent serum is necessary for the purpose.

Civilized woman, however, because of various reasons, has developed the habit of having a copious discharge of blood once every twenty-eight days to accomplish the same object. I have personally known of several cases where this has not been necessary, but these are rare exceptions, and the health of the average female depends upon the execution of this function every four weeks. If pain is present and only a small amount of blood is eliminated it is due to some congestion in the womb or ovaries, resulting from some of the reasons given in the first part of this chapter.

The following case will describe the treatment advisable for this class of disorder:—

CASE 34. Unmarried woman, 27 years of age. Suffering from backache in the lower part of the back, and had great pain at the start of each menstrual period, so that she was confined to her bed two or three days at a time. The backache also occurred at irregular times during the month.

I found the uterus prolapsed out of position and lying upon the rectum, with a small fibroid tumor growing through it. The patient was put on a fast, at first taking three meals a day of cherries (taking all she desired each time) and using at least one glass of water with each cherry meal. This was continued for fifteen days. On the tenth day of this fast the menstruation started with less pain than at any time in her life.

After the first fifteen days of treatment with a cherry fast, the fast was changed to plain water for an additional five days. In both these fasts two enemas daily were taken to ensure a complete cleansing of the lower bowel. Following this water fast the patient was put upon a diet of the following:—

- Breakfast—1 dish of whole wheat mush made from whole wheat, coarse ground, cooked slowly for one hour, and seasoned with butter or cream.
- Lunch— Choice of one of the following fruits: Apples, figs, cherries, or peaches, together with 2 ounces of pecan or almond nuts.
- Dinner— Choice of one of the following proteids: Lean beef or mutton, fish, chicken, turkey, Belgian hare.
Choice of 2 cooked non-starchy vegetables and choice of salad vegetables.
Dessert: Stewed fruit.

Proper exercises were recommended for developing the abdominal and back muscles, and certain electrical treatments were given to aid in raising the prolapsed uterus. By this time the backaches seldom occurred during the month, but generally appeared in a mild form at each menstruation.

Treatment was continued for several months with steady improvement, but there was not a complete disappearance of all symptoms. Shortly after this the patient was married, and after three months of married life a re-examination showed the uterus in normal position, with no fibroid growth evident. About a month after marriage the backache entirely disappeared, and two menstruations have been passed without a sign of any symptoms of pain or disorder during the menses. The change in her condition after marriage was so rapid, that I am forced to believe that in this case, as in many others, the adoption of normal sexual habits had a great deal to do with the cure.

SCANTY AND IRREGULAR MENSTRUATION. This condition is often the result of an anemic state of the blood, but is commonly caused by some form of gastro-intestinal derangement which produces pressure upon the womb and ovaries, either by impacted feces or excess

gas pressure. The anemia must be cured by proper dietary changes, and the correction of all habits which produce the faulty metabolism. If a low blood pressure exists, it will often take several months before a normal menstrual flow is established, occurring at the proper intervals. When such toxemias as tuberculosis or diabetes exist, these diseases must be cured, and the patient well on the road to complete recovery before the body will have enough strength to re-establish the normal menses. While the valves of the heart are leaking, the circulation of the blood will be so weak that the menses will often cease until the heart is able to function properly. The management of the following cases will explain the treatment necessary in this disorder:—

CASE 35. Married woman, 37 years of age. Head-aches from childhood. Menstrual periods varied from 6 weeks to 8, 11 and even 20 weeks. On one occasion patient lapsed to six months, and at another time twenty months passed without any sign of the menses. During this last period a valvular heart trouble developed and she could not climb one flight of stairs or use her arms in house work. Had been told by three different physicians that at her age nothing could be done to correct this condition. She had been examined by many physicians in different parts of the country, and had been treated by them with medicines, electricity, osteopathy, etc. When the patient came to me for treatment she had not menstruated for ten weeks, and was suffering from chronic gastritis which she had had for several years.

Was advised to take an orange juice fast, and continued this for thirty days, using the juice of about six oranges daily, with a plentiful supply of water. After about two weeks of this fast menstruation started, and

has continued to occur at regular periods every four weeks for the last seven years. The chronic condition of gastritis was, of course, cured by the fast, which was followed by judicious dieting. The headaches stopped after the second day of the fast, and have never occurred since. The patient is now 44 years of age, and has every appearance of being in perfect health.

PROFUSE MENSTRUATION. This disorder usually occurs with women who are passing through the change of life or menopause, and is to be attributed to one or more of the following causes:—

1. A certain condition of the blood, where the coagulation or clotting is not normal, due to the absence of certain elements.

2. Lacerations or tears in the womb left from childbirth will cause a constant bleeding at this period, which often can only be stopped by repairing the tears by surgical methods.

3. A common cause is often the irritation set up by the growth of small tumors inside of the uterus, which produce enough disturbance to cause a steady flow of blood.

4. Cancer of the womb.

In correcting this condition it is first advisable to fast the patient for a few days on plain water, which should then be followed by a diet for several days of nothing but gelatin or jello. This will quickly supply the deficiency of gelatin substances in the blood, and produce a normal coagulating power. If it does not stop the bleeding, an examination should be made to see if a tear in the womb is causing the irritation. If such a laceration is not found you may rest assured the bleeding is produced by internal polypus growths inside of the uterus. These growths should be removed,

which can be done by a simple surgical procedure called a curettement. If a cancer of the uterus exists, it may be cured in certain stages by a long fast, with the addition of proper electro-therapeutical measures.

The following are three typical cases, which may be regarded as models for treatment:—

CASE 36. Woman, 45 years of age. Menstruating steadily for three months. Several doctors told her an operation was absolutely necessary to remove tumors in the womb, which they said existed. Upon examination I could not discover the presence of any such tumors, and immediately put the patient on a water fast, which was taken for four days, after which the patient took the following diet:—

Six times daily she dissolved the contents of one package of jello or gelatin in a pint of hot water, and immediately drank it.

This was taken for three days, but on the first day of the gelatin diet menstruation ceased entirely. However, the gelatin was continued for two days more, after which the patient took a well-balanced diet, using a dish of jello every other day for several weeks. Four weeks after menstruation ceased, the menses again started, and continued normal for about four days. They have since appeared at the regular 28-day intervals for over two years. It has never been necessary to take any further treatment, as the patient seems to be perfectly normal in every way.

CASE 37. Unmarried woman, 38 years of age. Had menstruated steadily for over six months. She was very anemic from loss of blood, and had been confined to her bed for over two months, being unable to stand on her feet because of great weakness, but this did not seem to have any noticeable effect toward stopping the men-

stration. Had been advised by several physicians to have an operation, but would not consent.

I advised her to have a curettement. She was taken to the hospital practically against her will, and was operated upon, and several small tumors removed from the inside of the womb. She was in such a weakened condition that it was necessary to use only local anesthetics, but the curettement was performed quickly, and all bleeding stopped immediately afterwards.

The patient was then put on a milk diet for several weeks, and then finally upon a diet such as I would prescribe for anemia—practically the same as outlined in Case 2. After about three months of treatment she was restored to perfect health.

I cite this case particularly to show that if the dietetic treatment does not get quick results, it is often necessary to submit to surgical interference, no matter how prejudiced your point of view may be against attempting to cure disease by surgery.

CASE 38. Woman, 48 years of age. Had been menstruating every two weeks for about four years. Upon examination I found a large laceration at the neck of the womb. The patient was put on the same fasting and jello regime as in Case 36, and the menstruation changed to every three weeks, and continued this way for several months, until I gave her a course of electrical treatment, using the positive galvanic current in treating the laceration. This finally stopped the bleeding, so that her menses were restored to the normal, and for over two years they have been perfectly regular. This was a case where the cure could be made by electro-therapy combined with diet treatment, but there are many cases where the tearing of tissue has been so great that it can only be repaired by skilful surgery.

UTERINE FIBROIDS. The first indication of this disorder will usually be an acceleration of the pulse, with heart palpitation, and a dragging down feeling as if something were lying on the rectum. It is generally impossible for the patient to know whether or not she has a fibroid by any examination she can make of herself, until it has grown to a considerable size. If you have been examined by a competent physician and told that you have a fibroid tumor of the uterus, you will probably be told that an operation for removal of the organ is the only course that will save your life.

I do not believe that surgical measures are necessary or advisable in the treatment of fibroid tumors. There are several factors which must be considered in understanding a possible cure without surgery. The immediate cause of every one of these growths is the congestion in the uterus of morbid material deposited from a sluggish circulation. The cause of the sluggish circulation in the uterus is either because of malposition of the organ, or because of a repression of the normal sexual function. Statistics which I have gathered for the last ten years have shown that in every case of either a fibroid tumor or cancer of the breast or uterus, the patient lacked sexual desire entirely, or was so improperly mated that the sexual function could not be properly expressed. There has been no exception to this rule. However, I find that a long fast will absorb this enlargement and toughened growth, so that with sufficient exercise of the abdominal muscles, combined with hot sitz baths and hot douches, the uterus can be made to remain fairly normal even although the sexual repression is not removed.

CASE 39. Young woman, 28 years of age. Upon examination I found a large fibroid tumor partially pro-

truding from the vagina, and about the size of a large grapefruit. The stomach and intestines were prolapsed and lying upon the fibroid, which was being pushed downward by the weight.

An orange juice fast was started, using a glass of orange juice three times daily, together with a glass of water. Although the patient weighed only 112 pounds at the start of treatment, this fast was continued for twenty-eight days, reducing the weight to ninety-two pounds. By this time about three-fourths of the tumor had been removed by the absorbing power of the fast treatment. The patient was put on a milk diet at this point, taking a glass of raw milk every hour until three quarts were taken each day. This was gradually increased to six quarts daily, and the patient's weight was brought up from 92 pounds at the end of the fast, to 128 pounds at the end of sixty days.

She then started a general diet, using calisthenic exercises and taking long walks, and appeared to be in good health, although the fibroid growth had not entirely disappeared. She continued taking treatments for several months, with very little change in reducing the shape of the uterus. After six months in all of treatment she was married, and during the first month of married life all signs of the tumor entirely disappeared. She is now in perfect health, with the tissues of her uterus in as healthy a condition as it would be possible to find in one who had never suffered from a female disorder.

CASE 40. Woman, 54 years of age. Her home was in San Francisco, and she had been examined by the leading surgeons of that city, who advised an operation for the removal of a large fibroid tumor which almost completely filled the lower abdomen. She waited several months after being first told of her serious condition, until every one of the surgeons who had advised an operation re-

fused to operate upon her, claiming that she could not live through it because of a heart trouble which had developed through the tremendous pressure of the tumor.

A close friend happened to call upon her, who had been a patient of mine in Los Angeles, and had been cured of a fibroid tumor. She telegraphed to me asking my advice, stating that the patient's pulse beat was then 160 per minute, and that the doctors gave her no hope of recovery. I telegraphed as follows:

“Put patient on water fast at once, allowing her to drink water only when very thirsty. She may add a few drops of lemon to the water. Two enemas daily. Two epsom salt sponge baths daily.”

These instructions were followed strictly, being easily interpreted by the friend who had been my patient, and who had been under a similar treatment. After two weeks of this fast the pulse had reduced to a little under 100, and the patient was strong enough and had improved enough in every way to be able to take the train trip of 500 miles to Los Angeles. Her fast was continued for two weeks while in Los Angeles, during which time she took various local treatments with therapeutic lights, electro-therapy, etc., but because of lack of funds returned to San Francisco at that time. When she left the pulse was ninety, and the tumor had been reduced, according to her estimate, to about one-third of the original size. She was then placed upon the following diet:—

Breakfast—Whites of 2 eggs.

3 pieces brown, thin toast.

5 Senna prunes. (See recipe in chapter on Fruits.)

Lunch— One of the following fruits: Pears, peaches, grapes, apples, apricots, plums, or a glass of orange juice.

Dinner— Lean beef or mutton.
 1 non-starchy vegetable.
 Raw celery or tomatoes.

This diet was continued strictly for three months, and she reported to me by letter, claiming there was a gradual improvement in her health in every way, with a slow decrease in the size of the tumor. She was then put upon a diet which gave her a larger quantity of food value, and continued on this diet for over two years, with occasional fasting periods which she took of her own accord. She was advised to take treatments at her home with hot applications over the abdomen, and three times a week was advised to take a hot bath containing a large quantity of epsom salt. She was also instructed to take two hot douches each day, and vigorous calisthenic exercises twice daily. At the end of two and a half years from the time I first gave her the advice by telegraph, she again presented herself to the same surgeons who had refused to operate upon her, and they pronounced her perfectly well, and said there was no sign of any fibroid growth. This case is given particularly to show what may be accomplished in treatment by mail, if the patient is willing to follow the instructions to the letter.

FEVERS

The cause of every acute fever is some form of systemic toxemia or poisoning of the body by toxins which the eliminative processes have not been able sufficiently to expel. The blood, thickened by this irritating, poisonous material, is unable to pass through the capillaries and small blood vessels as easily as before. This produces a rapid action of the heart, because of the circulatory effort to push the blood along through contracted openings, and the poisoning and friction set up by this

forcing process produce an increased temperature of the body.

In some fevers the poisons are of such a nature that it is necessary to expel the surplus amount through the skin, in addition to the elimination which takes place through the regular channels for excretion. In this event the skin will show the irritation produced by breaking out in different kinds of rashes, varying according to the nature of the poison.

The most common kind of fever met with by a physician in general practice will be what is called a "bilious fever." With this condition the tongue becomes coated, the breath offensive, the pupils of the eyes will turn yellow, and the skin will often assume a sallow and yellow hue. There will be no cough present with this fever as in influenza, and often the lack of this symptom will be the distinguishing diagnostic point in determining the fever to be caused by a derangement of the liver and gall bladder.

Fever is always found in a patient suffering from an inflammation of the appendix where pus is present. The fever associated with influenza is produced by toxemia of an especially virulent nature, and in the effort of the body to eliminate this poison the lungs become inflamed with the irritating material which the body is trying to throw off in the form of gases. This disturbance produces a slight cough at first, but before the disease is cured the patient will be forced to cough up large quantities of phlegm which have accumulated in the air passages because of the irritation caused by the influenza toxins.

The eruptive fevers such as measles, chicken-pox, smallpox, and scarlet fever, are all produced by different poisons which have accumulated in the body because of

wrong habits of life, and the acute stage of the disease is simply a period of crisis, during which time the bodily forces are practically going through a revolution in an effort to rid the body of its long continued poisoning. Even the so-called "infectious" diseases must have a suitable soil in the body for the cultivation of infectious or contagious bacterial life.

A neglected cold will often develop into some form of disease where there will be fever, and in this connection an axiom of Benjamin Franklin's has often been misunderstood. He said: "Feed a cold, and starve a fever," but the meaning he intended to convey was not that these were the two ways of treating two different troubles, but that if you fed a cold you would have to starve the resultant fever.

No matter what kind of fever develops, the fasting regime should be started at once, at the very first sign of a rise in temperature. The best fast is usually that taken with large quantities of water, to which has been added a desired amount of lemon juice. If the fever is caused by the accumulation and poisoning of bile in the blood stream, as in bilious fever, the addition of the lemon juice will bring about a more speedy recovery. A bilious fever might rise to 102 or even 103 degrees, but would subside to the normal in the first day or two if this fast were used and frequent enemas taken.

It is always advisable in treating fever to sponge the body several times daily with epsom-salt warm water, which is made by dissolving a tablespoonful of epsom salts in a quart of water. When in bed the patient should be kept well covered, and it is advisable to keep the body wrapped in woolen blankets, so that in case a perspiration starts the moisture will be taken up by the wool blanket, and the pores of the skin will remain open and be allowed to continue eliminating freely. If the patient

perspires while ordinary sheets are touching the body, the sheets will become wet with the perspiration, and if a small amount of air gets under the covers these wet sheets will become cold and clammy, causing the pores to contract, and making the temperature rise quickly, because the skin elimination has been suddenly checked.

If the fever persists after two days, and there are no special symptoms to indicate appendicitis, mastoiditis, or any other disease where there is an accumulation of pus, either a slight cough will start, as in influenza, or the skin will break out with some kind of a rash. If the fever reaches this stage the patient must be kept sweating constantly, and he must be forced to take a glass of water every fifteen or twenty minutes. More covers should be added to the bed, and a hot water bottle placed at the feet.

If a skin eruption does not develop, it is always advisable to rub the body with oil of wintergreen, being careful to avoid having any of the oil touch the genital organs, as its efficacy lies in the fact that it irritates the skin and aids in keeping the pores open, thereby inducing a more copious perspiration. If a rash appears on the body, this in itself will cause enough irritation of the skin so that the oil of wintergreen will not be needed, as it would cause an almost unbearable burning if applied in those circumstances.

The foregoing describes the general conduct of any kind of a fast for an acute fever, and below I will give you further details of the handling of two typical cases.

CASE 41. Young woman, 28 years of age. She had developed a violent headache while working, and had been forced to go home and lie down in a dark room. The headache continued for several hours, and a fever gradually developed. When I was called in on the case I found

that her temperature had reached 103 degrees. Her tongue was heavily coated, and she had every appearance of being in a state of poisoning caused by biliousness, but as there were a great many cases of influenza at that time I started giving her the sweating treatment as outlined in the earlier part of this article.

After taking two enemas and getting a large accumulation of feces away from the colon, she was given several strong doses of lemon juice and water, using the juice of a whole lemon to each glass of water. While the enemas were being taken the bed was properly prepared, so that when she was put back into it she got in between heavy woolen blankets, with a hot water bottle at her feet, and a good many other heavy coverings on top of the woolen blankets. Her chest was then rubbed with plain kerosene oil, which can be used as a substitute for the wintergreen oil if the latter cannot be secured quickly enough, but care must be exercised not to apply too much kerosene or the skin will be blistered, a thing that cannot happen with the wintergreen oil no matter how much may be used.

The patient started to perspire almost immediately, but the temperature continued to rise until it was over 104 degrees, by which time she was in a semi-delirious condition and had to be practically held down in bed. After an hour of copious sweating the fever started to lower, and within eight hours was down to the normal temperature of 98.6 degrees. By that time she was able to sleep, in spite of the continuation of the headache, but this had disappeared when she wakened up about four hours later. She was allowed to remain in the woolen blankets for a few hours longer, but did not perspire any more, and when it became evident that the fever had entirely subsided she was given a sponge bath, after which she was again put between the woolen blankets in

order to avoid any danger of closing the pores too quickly, and thereby imprisoning poisons still to be eliminated.

The fast was continued, the patient drinking large quantities of water, and two enemas daily were taken for several days. On the day after the disappearance of all traces of fever the patient was allowed to sit up, and two days later was able to go back to work. As the tongue did not clear up rapidly she was kept on a fruit juice fast for about ten days in all, in order to cleanse her system thoroughly from accumulated toxins. After this she was placed upon a normal diet, and was instructed to take more vigorous physical exercise and to diminish the amount of fat and carbohydrate foods she had been in the habit of eating. In this case there was no skin eruption, and no cough developed.

It will thus be seen that in the cure of bilious fever although the temperature may reach a high point for a short time, it will rapidly diminish to the normal if suitable eliminative measures are used to aid the body in expelling the poisons.

CASE 42. Man, 39 years of age. Came to my office for examination for stomach trouble. He said he had been feeling out of sorts for some time, and had been expecting to come to me for diagnosis and treatment, but had been putting it off until that very day, on the morning of which he had developed a headache between the eyes, and did not feel able to go to work.

In the course of examination, in addition to the digestive derangement I was able to discover, I found his temperature to be 102 degrees. He said that he did not have a cough, but during the examination I noticed that he coughed slightly several times, and after several more tests were made I told him that no matter what his

chronic condition might be it was my opinion that he was apparently having an acute attack of influenza. He was loath to believe this, but was finally persuaded to go home and go to bed between woolen blankets.

The treatment that was then given to him was almost identical with that mentioned in the previous case, No. 41, but his fever continued to rise until it reached 104 degrees and finally two-fifths of a degree over that figure. This temperature continued for over two days, in spite of the eliminative treatment he was undergoing, and then gradually started to reduce, but it was over six days from the day he came to my office before the fever was normal. His cough became worse, and by the time the fever had abated he was coughing up large quantities of mucus.

He was advised to stay in bed for about a week after the fever had entirely left him, and was given a very light diet consisting mostly of soup made from non-starchy vegetables. Of course he was greatly weakened by being forced to remain in bed for so long a period, but after two weeks of carefully selected diet, gradually increasing the amount of exercise, he was finally able to return to his office. From that time on the patient came to my office for treatment with electro-therapy, and took daily radiations over the chest from a powerful therapeutic light. It was, however, over two months from the time he was able to start working again before the cough had entirely disappeared. He is now in the best of health, with no symptom of any of the lung trouble which so often follows a case of influenza.

I cannot over-emphasize the necessity for following the strictest regime after recovering from influenza, as the largest percentage of cases eventually die of tuberculosis because simple measures are not adopted for curing the inflamed condition of the lungs which always

exists after the acute symptoms of influenza have disappeared.

FLATULENCE

This distressing symptom is without doubt the most common ailment for which patients come to me for treatment. The most characteristic statement I have heard from patients, and from probably 95 per cent of them, is: "I have so much gas!" while the great majority, being asked what symptom they would like to get rid of first, almost invariably reply: "I think the thing that bothers me most is so much gas!"

Besides the auto-intoxication which is produced by the fermenting foods which make gas, the gas pressure is itself a cause of diseases of the ovaries, womb, heart, gall bladder, spleen, and other organs, because of the congestion of the circulation in those organs by the constant pressure exercised upon them by gas pockets.

Of course the cause of the gas formation must be investigated, understood, and removed, before the disappearance of this unpleasant symptom can be looked for. Some of the main causes of flatulence are the following: overeating of any kind of food; improper combinations of food; the use of an excess of starches and sugars (remember, anything out of which you could make homebrew—beer, or liquor—might furnish the material for gas formation, because of fermentation in the stomach or intestines); the use of food which is gas producing in itself, such as: onions, garlic, cooked cabbage, etc.; eating when tired; eating too rapidly.

Some form of the fasting cure is always indicated in the treatment of this disorder, in order to completely cleanse the entire alimentary canal of the accumulation of toxins and fecal matter. During the fast the digestive

juices, which are often improperly balanced in this disorder, will adjust themselves, and after the fast is completed will be found to be in proper proportion to one another.

After the fast it is necessary to adopt the strictest dietetic regime, and continue for a long time to avoid those foods which ferment easily. Under no circumstances should you ever use a food which is seasoned with onions or garlic, and baked beans and cooked cabbage should be positively taboo. If you experiment you will find that a salad flavored with garlic by simply rubbing it around the dish, will spoil an otherwise perfect dinner by producing quantities of gas. From a study of the chemical composition of onions and garlic it does not appear that this could be possible, but practical experience has proven it to be an infallible rule.

I must urge you to be particularly careful about taking enough time for your meals, and generally this can best be brought about by masticating the food very thoroughly and swallowing it in small quantities, enjoying every bite as it passes out of the mouth. You will find if you eat your food slowly and carefully that you will be satisfied with a much smaller quantity. When eating rapidly you will notice that you often swallow a large amount of air with the food, and this, added to the air already in the stomach, will distend the abdomen and make you feel uncomfortable.

If you are tired when mealtime comes, it is far better for you in every way that you should lie down and take at least a 30-minute rest, even if the food has to be put away and warmed again for your meal. Do not be so anxious to please the cook as to eat when you haven't enough energy to digest your food. When really tired, rest, and not food, is most needed.

You will find great benefit from taking vigorous physical culture exercises and long walks, no matter what kind of work you may be doing. You will have no difficulty in believing that this is indispensable to the brain worker, but I can assure you that even a man working at the hardest kind of manual labor will be benefited through proper systematic calisthenic exercises, and be better able to digest his food.

The description of the following cases will make clear the usual method of handling such:—

CASE 43. Male, 41 years of age. Came to me suffering with pains in the abdomen. Had been treated for several months by a stomach specialist for ulcers of the stomach, but after a careful diagnosis with the use of the X-ray I could discover no sign of ulceration, and decided that his pains were caused entirely by pressure of gas from fermenting food. The diet he had been using for stomach ulcer was such as I might have prescribed for him if I wished him to have a large amount of stomach and intestinal gas, and really I could not have suggested anything more unwholesome if I had actually been attempting to make him sick. He was taking starches and fruits together indiscriminately, and drinking cream at meal times and in between meals. At breakfast he had a glass of orange juice followed by a dish of oatmeal seasoned with sugar. This combination had been prescribed by a stomach specialist for the cure of stomach ulcer, but what it actually did was to make him get steadily worse.

I immediately put him on a fast of water for three days, after which the following diet was taken:—

Breakfast—Whites of 3 eggs.

3 or 4 slices of thin, brown toast.

Choice of stewed fruit, without sugar.

Lunch—Glass of orange juice, with a glass of water.

Dinner— One proteid from the following list: Lean beef or mutton, chicken, turkey, fish, or Belgian hare.
2 non-starchy vegetables.
Raw celery.

This diet was taken for over one month. After the sixth day of the diet all abdominal pains disappeared and never again returned. From that time on he was never conscious of having any gas formation, and did not expel any either from the intestines or by belching. A careful examination made every few days showed that gas was still being formed from the improperly proportioned digestive juices, but this entirely disappeared during the first month of treatment, and the patient is now in perfect health, with no symptoms whatever in the abdomen to remind him that he is the possessor either of a stomach or intestines at all.

The mixed diet he had been using before starting under my treatment, had been given him under the belief that he was suffering from stomach ulcer, and a great deal of soft, starchy food was used, some dieticians being under the impression that stomach ulcers are best treated by soft, mushy foods, no matter how much fermentation they may cause. If stomach ulcer had been present, the diet he was taking would have made him worse, and as it was, fermentation was increased because of the large amount of carbohydrate food he was using.

CASE 44. Woman, 38 years of age. Was suffering from palpitation of the heart and shortness of breath. Weight was 127 lbs. Although this weight seemed about normal for her height, her abdomen measured 48" when it should have measured about 25". This was caused by an accumulation of fat, chiefly because her intestines were constantly filled with a large amount of gas, distending the abdomen until it became of an unnatural size.

A fast of grapefruit juice was started, using a glass 3 times daily, together with a glass of water, and after the third day of this fast the abdomen had decreased to 38", a loss of ten inches in circumference. This bloated condition which had been removed was almost entirely gas. The fast was continued for 20 days, during which time the abdomen came down to 24" in circumference, that is to say exactly half the circumference at the start of the treatment.

The patient was then put upon a diet practically the same as that given in Case 43, whereupon the abdomen again gradually increased in size until it was about 35" in circumference, and then it was steadily reduced through systematic exercising for the development of the abdominal muscles. There was no further bloated appearance from gas pressure, but the abdominal walls had been so distended and stretched out of shape, that it took several months before the abdomen was again of a normal contour. Constipation, which had existed for many years, was entirely overcome, and a partial obstruction of the bowels was removed, which had no doubt been responsible for a good deal of the accumulation of gas which could not force its way through to the rectum. The patient is still in perfect health after several years, and remains so through living upon a careful diet, combined with sufficient muscular exercise to keep up the tone of the abdominal muscles.

GALLSTONES

Gallstones are alkaline concretions which form in the gall ducts or gall bladder, from the stagnation of thickened bile. It frequently takes years for their formation, during which time the alkaline accumulations pack harder and harder together, allowing the softer part of the bile

to flow out, and leaving behind these hardened, calcareous substances. The blocking of the gall ducts leading to the intestines will produce symptoms often mistaken for other diseases.

Fully one-half of the patients who come to me believing they have stomach ulcers or gastritis, are really affected with some form of gall bladder disorder. I have found a very large number of cases, improperly diagnosed as stomach ulcer by other physicians, which have responded so rapidly to treatment as gall bladder derangements, as to lose all symptoms in a day or two.

When there is a stoppage of bile in the gall bladder, either by thickened bile or by gall-stone formation, there will always be a tender spot halfway between the navel and the ribs on the right side of the abdomen. The color of the skin usually changes every few days, becoming a yellow, sallow hue at irregular intervals. The tongue will be coated, there will be loss of appetite and there may or may not be sharp, colicky pains felt on the right side.

I have had many cases where large gall-stones have been removed by my treatment, where no typical gall-stone colic had been experienced at all. If the sharp pains and contractions of the gall-stone colic are present in their worst form, the patient will be unable to stand or even sit up straight, but will be forced to lie down with the knees drawn up to the chest. Even this position does not relieve the pain. I am convinced that these colicky symptoms are not present in most cases, and that a serious stoppage of bile or a blocking up of the bile ducts with a gall-stone may be present without any of such symptoms being in evidence at all.

There is no doubt that this disorder is caused by over-indulgence in starches and sugars, without sufficient

vigorous exercise to take care of the excess. Out of thousands of cases of this trouble which have come under my observation, I have never discovered one affecting an athlete who kept himself in good condition by constant training. It occurs almost entirely among those living a sedentary life, and who insist on eating such a kind and quantity of food as only hard physical exercise would necessitate.

The first method of treatment to be used for any disorder of the liver or gall-bladder is the olive oil and fruit juice regime. Just before retiring the patient usually takes 4 ozs. of olive oil, together with 4 ozs. of lemon, orange, or grapefruit juice. The oil and fruit juice are beaten up well together into as much of an emulsion as possible, and the mixture, if taken just before retiring, is less liable to cause nausea while the patient is asleep. This may be taken on one night only, or on several nights in succession, and should be followed by a fast with grapefruit juice, lemon juice, or orange juice. This fast should be continued as long as necessary, and the olive oil treatment may be taken as many times as seems advisable to accomplish a thorough cleansing of the gall-bladder and liver.

You will find it a great aid to the cure if osteopathic or massage manipulations of the gall-bladder are used. Heat treatment over the liver and gall-bladder may be expected to increase the rapidity of the cure. This heat is best administered through the radiations from a powerful therapeutic light.

After the removal of the gall-stones has been accomplished, do not forget that an increased amount of exercise is absolutely essential to ensure a permanent cure. The carbohydrates must be reduced in quantity, and all those rules given in the article on Biliousness rigidly adhered to.

CASE 45. Man, 40 years of age. Had suffered from several attacks of gall-stone colic, and had been advised to undergo an operation, but would not consent, because in several cases with which he was familiar where operations had been performed the patients had only received temporary relief, and afterwards had a more aggravated form of the trouble than before.

I was called in on the case while he was having a most severe attack of gall-stone colic, and it was several hours before the cramps could be relieved. At first he was so nauseated that everything taken into his stomach would be immediately vomited, and the olive oil regime could not be administered until after the acute attack had subsided. However, through the use of small amounts of lemon juice, together with hot applications over the gall-bladder and hot enemas, the trouble was sufficiently relieved during the first day to enable him, after 24 hours of this treatment, to retain 4 ozs. of olive oil and 4 ozs. of lemon juice. After taking these he was able to sleep for 12 hours, being utterly exhausted from the acute attack.

As soon as he awakened he was given an enema of 2 quarts of hot water. This brought away about 200 small gall-stones with quantities of bile and mucus. The olive oil treatment was administered each night for three more days, the patient using a lemon juice fast during the rest of the time, that is, taking the juice of half a lemon in a glass of water every half-hour of the day. The fast was not continued long, as the patient wanted to get back to his office for some important business, so he was put upon a careful diet, and the olive oil and grapefruit juice taken every third day for six more times. The bile stones and gall-stones continued to come out with the enemas until they were all gradually eliminated, and at the end of 30

days there was no further sign of anything except bile being brought away.

This cure was effected over four years ago, and the patient has remained in perfect health ever since, with not the slightest return of any symptom of gall-stones. He has also remained well in every way, without any of the headaches which he experienced for so many years, and which were no doubt caused by a chronic state of biliousness.

CASE 46. Woman, 71 years of age. Had been treated all her life for stomach and intestinal disorders, but upon examination I assured her that her trouble was mostly in the gall-bladder and liver, and that she gave every evidence of having a large accumulation of gall-stones. She had been to most of the leading specialists in the United States who had diagnosed her case quite differently, and she was loath to believe that gall-stones were the cause of her digestive troubles, as she had never had sharp pains in the region of the gall-bladder. However, she was soon convinced of the accuracy of my diagnosis by the results she received from the very first few days of treatment.

The first night under treatment she took the grapefruit juice and olive oil regime, following this with a fast of grapefruit juice, taking the juice of a grapefruit every 2 hours, with a glass of water. The first morning after taking the olive oil the enema brought away a large quantity of gallstones, and without any further administration of oil they continued to pass for several days. After ten days she was put upon a regular diet, and continued taking osteopathic treatment, with manipulations of the gall-bladder. Her digestion was improved, and she felt better in every way for about three weeks. At the end of that time she again became nauseated, and

even though she immediately started fasting she vomited for about two days. The material vomited contained a large amount of bile, and I told her that I believed this unexpected nausea was caused by some more gall-stones which were trying to pass into the intestines through the gall ducts, but she was not able to take any more olive oil at this time because of her extreme nausea.

At the end of two days the nausea suddenly ceased, and a few hours afterwards the enema washed out a large gall-stone about $1\frac{1}{4}$ " in diameter, of a very hard consistency, and looking like a piece of sandstone. The stone was examined in several laboratories and pronounced to be a gall-stone. I have seen many gall-stones removed through this treatment, but usually they are only from $\frac{1}{4}$ " to $\frac{1}{2}$ " in diameter, being dissolved to that size before they can pass through the gall ducts. This large stone, however, was brought away without any cramps or colic, and with only symptoms of nausea until it passed through.

This cure was completed over a year ago, and the patient has remained perfectly well since that time, having lost entirely all of the digestive disorders from which she had suffered for years. She declares that she does not know of any time in her life when she felt so well as at present. She is living on a simple, well-selected diet, but even at such times as she has used prohibited foods she has felt no distress whatsoever.

GOITRE

This is a disorder affecting the thyroid gland, and is evidenced by a swelling of the gland, which enlarges either outwardly or inwardly. The simple form of goitre is the one in which the thyroid enlarges outwardly,

and makes the neck very large. In exophthalmic goitre, on the other hand, the thyroid grows inwardly against the carotid arteries and nerves of the neck, producing such an effect upon the nerves and blood circulation going to the eyes as to make the eyes protrude. In either form of goitre the heart is usually affected because of the increased work thrown upon it when the circulation is forced through the enlarged thyroid gland.

The gland may be enlarged gradually through a constriction in the neck caused by the collar bone pressing down upon the thyroid, or it may be enlarged suddenly during childbirth if the patient is allowed to throw her head backwards while making a certain kind of strain, in an effort to aid in expelling the child. This may be avoided by the nurse holding the patient's head up and not allowing her to throw it backwards. The most common cause, however, is the accumulation in the thyroid of certain materials deposited there from a thickened blood stream. These materials are usually in the form of food substances which the cells of the body cannot use, and which are produced by an excess of starchy food. This extra material congests or dams up in the thyroid gland, producing an enlargement, and blocking the circulation, which has the effect of causing a rapid heart beat, and often trouble with the valves of the heart.

No matter what the original cause of the goitre may have been, the cure is always possible through the use of the fruit fast. This treatment of course removes the thickened material from the blood, and the circulation carries off the excess material which has been dammed up in the gland. The thyroid decreases in size, and sometimes the enlargement entirely disappears, but if the size does not become perfectly normal the cure can at least be so complete that there will be a free circulation through the thyroid, and the heart strain will be re-

moved. Even if the enlargement came suddenly from a strain, it can be reduced by the fasting cure, and will remain normal if the diet is well regulated from that time on.

CASE 47. Young lady, 18 years of age. Was suffering from a simple goitre, which is the largest kind, however, and her neck was enlarged to about 18 inches. She started fasting on the juice of one orange every two hours, and continued this fast for exactly 30 days. All signs of the enlarged thyroid had disappeared at about the twentieth day of the fast, but it was thought advisable to continue fasting to ensure a permanent cure. The fast was broken upon the following diet:—

- | | |
|------------|--|
| Breakfast— | 1 Egg. |
| | 3 Pieces brown, thin toast. |
| | Dish of stewed fruit. |
| Lunch— | Choice of whatever desired of the following raw vegetables: Spinach, asparagus, string beans, lettuce, celery, parsley, carrots, turnips, beets, parsnips. |
| Dinner— | Small piece of broiled steak. |
| | 2 Cooked, non-starchy vegetables. |
| | Salad of two or more non-starchy vegetables. |

This diet was continued for two weeks, and then other articles of food were added, until at the end of a month the patient was using almost any article of food desired. She was, however, advised to be cautious in the use of starches, and if they were used to use them only in small quantities, and always in proper combination with other food. The patient has remained perfectly well for over eight years, and about a year ago gave birth to a baby, without the strain of childbirth having any effect upon the thyroid. Her neck seems to be perfectly normal in every way, is well formed, and there is no evidence of any enlargement of the thyroid gland.

CASE 48. Young man, 24 years of age. Was a returned soldier, and was receiving compensation from the Government as being incurable. Upon examination I found him suffering from an aneurism of the thoracic aorta, valvular leakage of the heart, exophthalmic goitre, with hyperthyroidism. His systolic blood pressure was 180 millimeters, and his pulse 160 beats to the minute.

At the time he presented himself to me for treatment, the Government doctors had told him that he had about three months to live; that if an operation were performed upon his thyroid he might live a little while longer; but that there was no hope of a permanent cure.

He was immediately put on a fast of a glass of orange juice three times daily, with a glass of water. This was continued for 30 days. At the end of this fast he was placed upon a milk diet, taking 3 quarts daily. His improvement became so rapid from the very first, his blood pressure being reduced and his pulse quickly returning to normal, that before the end of the plan of a 30-day milk diet he had established a homestead claim and was chopping out sagebrush and greasewood.

After the 30 days of the milk diet, he was then put upon a well-balanced diet, being warned against too frequent a use of starches, and by the end of three months, which was the time given him to live by the Government doctors, he was apparently perfectly well. He has remained in good health ever since, that is for a period of about two years, and a few days before this article was written, I re-examined him and found no traces of the aneurism, the heart functioning perfectly in every way, blood pressure 120 millimeters systolic, and pulse 72. At the present time he is a perfect physical specimen of manhood, with no organic or functional defect.

HEADACHE

The cause of headache seldom can be found in the head itself, but must be understood to be the symptom of some other disorder located in another part of the body, which affects the nerves in the head by reflex action.

If the ache seems back of the eyes, it is either caused by constipation or eye strain. If the headaches occur only on bright, sunny days, it indicates that suitable glasses should be worn. If not manifested in this way, you may expect that constipation is the principal cause, and often you will find a pressure in the rectum of impacted feces.

The bilious "sick" headache is accompanied by nausea, and can only be cured when biliousness is overcome. Anemia produces a peculiar dizzy feeling in the head, and will persist until the proper changes are made in the blood. If this is the case, you must be satisfied with a slow cure.

The low blood pressure headache, caused by fatigue, is quite common with women who "love to shop." High blood pressure headache is usually evidenced by a feeling of pressure around the head, as if a band of iron were being drawn tightly round the skull. This is easily cured as soon as the blood pressure is reduced.

Bad air is frequently a cause of headache, if the sufferer sits too long in a stuffy room without sufficient ventilation or a plentiful supply of fresh air. Headache at the top of the head is caused by some disorder of the bladder.

The form least understood is that which occurs at the base of the brain, and is always brought on by uterine congestion. The principal causes of this congestion in women are troubles of menstruation, prolapsed uterus,

constipation (which makes pressure against the uterus), and congestion in the womb caused by an incomplete termination of the sexual act.

Migraine is a form of headache which makes habitual visits at certain definite times, and will often occur on some particular day of the week. There is much reason for believing that this is caused by certain expectant states of the mind, but I have never treated a case which could not be cured by the methods used in the ordinary form of headache. Cases of many years' standing, which have resisted all medicinal remedies used, are often cured as quickly as an ordinary bilious headache.

In the above discussion of the causes of headache, you will see that headache is only a symptom of some other disorder, and I refer you to the articles on those other subjects, as discussed in other parts of this book. The typical cases listed below will suggest to you the procedure to be taken in your own case.

CASE 49. Woman, 30 years of age. Had suffered from headaches in the forehead and behind the eyes for 15 years. In my examination of this patient I found no organic trouble, and thought at first that she needed a change of glasses, but after an examination of the eyes by a competent oculist, we found that there was not enough eyestrain to be responsible for her repeated headaches. I re-examined the rectum, and found a large mass of impacted feces. On further questioning I discovered that although the patient had not been troubled with constipation, she had had difficulty in starting a bowel movement, because it seemed that there was a blocking up or packing of the feces in the rectum. As soon as this was started the bowels would empty themselves normally.

A fast of ripe figs was recommended for several days, the patient taking the figs as often as desired. Two

enemas daily were used, and the bowels were completely cleansed of all accumulations. The patient was then put on a well-proportioned diet, and cautioned to avoid those foods which were particularly constipating, such as starches and sugars. In addition she was told to use only a small amount of toast, as all toasted foods, being concentrated, tend to produce constipation.

A few days after resuming her diet a slight headache occurred again, and upon examining the rectum once more, I found the same condition of impacted feces. I then advised a course of treatment with rectal irrigations of cold water. This treatment is given by patients to themselves while sitting on the toilet. A rectal irrigating tube for the purpose can be purchased in any surgical supply store and consists of an instrument which can be attached to the enema bag and which has an inlet and outlet so that water can run in and out. In this way several quarts of cold water can be brought into contact with the rectal membranes, which seems to aid in producing a healthy tone of the rectal muscles, and helps in the cure of a dilated rectum. I advised the patient to use glycerine suppositories twice a day for several weeks, to help in lubricating the rectal opening.

With these treatments and the continuation of the diet, the patient lost all traces of the headaches. Her bowels move normally twice a day at the present time, and with a stool formed of the proper consistency, so that with the increased strength of the rectal muscles, there is no stopping or plugging up of waste material.

CASE 50. Female, 34 years of age. Had suffered from headaches in the back of the head ever since the age of puberty. They occurred a day or two before the

start of menstruation, disappearing for a day during the period, and recurring just at the completion of the menstrual flow. They also occurred at different times during the month.

I found the uterus out of position, being prolapsed, along with a prolapsus of the stomach and the intestines. She came to my office for examination several days before the time for the menses to occur, and started a fast using only plain water. Two enemas a day were taken. The menses started without a sign of headache. Relief from this kind of headache caused by uterine congestion is usually brought about as quickly as the bowels are completely emptied by enemas, as this frees the circulation going to and coming from the uterus, and the congestion is thereby relieved even if only temporarily.

The fast was continued for ten days, and the patient was then put on a general diet. Suitable exercises were recommended for developing the abdominal muscles, thereby so strengthening the entire abdomen and pelvic section that the uterus was slowly brought back to the normal position. The stomach and intestines were also restored to their proper places by the same developing exercises. The headaches in the back of the head recurred in a mild form for several weeks until the prolapsus of the uterus was entirely cured, when they ceased altogether, and have not occurred since. The normal sexual impulse, which had been absent several years, returned, and a few months later this patient became pregnant for the first time in her married life of sixteen years, and gave birth to a strong boy. The child is now 4 years of age, and the mother has never had a recurrence of any form of headache.

*HEART DERANGEMENTS**Valvular Troubles*

The circulation of blood through the body is governed by the heart with its many valves, and it is therefore essential for the enjoyment of perfect health that the various parts of this organ should work with the proper co-ordination. Many persons who have not had a thorough examination by a competent physician, are unaware of any heart defect, and often suffer from certain symptoms, such as general weakness, shortness of breath, and poor circulation, without knowing that these conditions are frequently caused by insufficiency of proper tone of the heart valves. In some cases the valves are gradually narrowed or hardened with a consequent inability to close completely. In other cases, an inflammation of the entire membrane lining of the organ exists.

The principal causes are:

1. Overeating of all kinds of food, and drinking of too much liquid.
2. The use of an excess of starches and sugars used above the bodily requirements and producing flatulence.
3. The use of improper combinations of food which produce excess stomach and intestinal gas.
4. The use of gassy food such as onions, garlic, cooked cabbage, dry beans, etc.
5. Over-exertion to which the body has not been accustomed. Athletes who overtrain at one time and do not take care of themselves in the intervals between contests, will often bring on this trouble.
6. Any growth in the body or enlargement of an organ which interferes with the free circulation of the blood will make an undue strain upon the heart muscles. (See Rapid Heart.)

If the patient will recognize the above causes as responsible for this condition, he has already understood many of the changes in habits necessary for a cure. In this disorder, as with many others, we are often half dead before it is recognized, but half cured when we understand the causes which are responsible.

In order to give the heart something of a rest it is advisable to fast from all food except the juice of acid fruit for a few days, after which the patient should use a diet free from all gas-forming material. A strict diet of proteids and non-starchy vegetables, with the elimination of all carbohydrate foods such as starch and sugar, is indispensable to a complete cure.

The blood must be thinned of weight-producing materials, so the volume will be decreased and the quality increased. Small amounts of liquids are to be used, especially when dropsy is present. The weight of the body must be kept down to the point where no excess fatty deposits are present, as this condition causes a needless strain upon the heart.

All the muscles of the body must be exercised carefully with slow calisthenic movements, which should be increased gradually as the strength permits. Any influence which is inclined to weaken the functional system, will also weaken the heart muscles. The evening meal should be eaten early to give the stomach sufficient time for emptying before sleep, and a hot water bottle should be placed at the feet at night to aid the circulation of blood during the sleeping period.

The above outline of the treatment essential for a cure explains in a general way the method I have used successfully in hundreds of cases. Do not consider your case incurable until you have followed carefully the directions I have given you, for at least a year if necessary.

Every case will be benefited, and I have records of many hopeless patients who were restored to perfect health through this method.

The following case will give you a definite model to follow in applying the cure to yourself:—

CASE 51. VALVULAR TROUBLE. Young woman, 35 years of age. Had been troubled with cold hands and feet for years, and could not go in the ocean without having her lips and finger nails turn blue. Felt very weak most of the time, and was unable to do any regular work. Before coming to me she had been turned down for life insurance because of valvular leakage of the heart. I found that she also had a prolapsed stomach and intestines, and that she was troubled with a good deal of stomach and intestinal gas. I explained to her that I believed that this gas pressure was responsible for her heart trouble, and that if she would diet carefully the gas could be removed.

She accordingly started on a fruit-juice fast, drinking nothing but water, in each glass of which she squeezed a few drops of lemon juice. No other food or liquid of any kind was taken for 15 days. At the end of that time the blood pressure, which had been 110 millimeters systolic, rose to 115 millimeters, and she felt better in every way. She was then put on a milk diet, using three quarts daily of pure Holstein milk, taken in the raw, unpasteurized state, at the rate of one glass every hour during the day until 3 quarts had been taken. Before each glass of milk the patient took a teaspoonful of lemon juice, which aids in the digestion of the milk. This diet was continued for 30 days, and at the end of that time she was given a diet of the following:—

- Breakfast—2 Coddled eggs.
 3 Slices of brown, thin toast.
 Dish of stewed fruit, selected from the following list: Prunes, raisins, figs, apricots, baked or stewed apple.
- Lunch— One quart of milk taken one glass at a time every 15 minutes until the four 8-oz. glasses in the quart are taken.
 At this lunch of milk she also used a quarter of a pound of raisins.
- Dinner— Choice of one of the following proteid foods: Beef or mutton, chicken, turkey, Belgian hare, and fish.
 One of the following cooked non-starchy vegetables:

Summer squash	Celery
Small green string beans	Swiss Chard
Spinach	Asparagus
Egg plant	Oyster plant
Beet tops	Turnip tops
Kale	Mustard greens
Cucumbers	Chayotes
French artichokes	Parsley
Zucchini (Italian squash)	Lettuce

Choice of one of the following raw or salad vegetables:

Watercress	Parsley
Asparagus	Lettuce
Cucumbers	Endive
Spinach	Tomatoes
Celery	

After several weeks of this diet, combined with osteopathic treatment and massage, also the proper electrotherapy treatment, she was restored to the normal, and I could not discover any sign of the valvular trouble in the heart. She has since passed an examination in one of the largest insurance companies and is working in their office, remaining in perfect health.

Fatty Heart

We are all familiar with the headline seen so often in the morning paper: "Mr. Prominent Citizen, apparently in the best of health, sat down to read the evening paper after a hearty dinner, and was found dead in his chair." After this a list of his virtues follows, and never a thought printed about the cause of death which will point to a lesson to be learned. Is there any mystery about such a death? Better for the coming generations if the headlines read thus:—

"Mr. Over-Fed stuffed himself to death last night, and cheated himself, his family, and his community of what might have been a useful citizen."

A fatty heart is only present with the obese and the over-fed. Young men just at the prime of life who have been prosperous, often make the mistake of indulging their appetites to the extreme, at the same time as they give up physical exercise. This brings on the typical case of fatty enlargement of the heart, which will result in sudden death as soon as the pressure of fat and gases against the heart becomes too pronounced.

Sometimes there is warning in advance by such symptoms as shortness of breath, palpitation upon exertion, and discomfort when lying on the left side; but often these are not noticed soon enough, and Mr. Over-Fed finds himself suddenly joining a class in harp playing.

The cure is simple and depends almost entirely in reducing the weight of the whole body. No special organic treatment is necessary. The scales are the best guide to your progress, and must be consulted often. (See chapter on Obesity.)

CASE 52. Man, 40 years of age. Weight 206 lbs. Was unable to sleep at night because of the discomfort he experienced when lying down. The palpitations of his

heart were sufficient to shake the bed. After a careful examination, I could find no organic trouble except an enlarged, fatty heart. He was put on the following diet:—

One or two sliced tomatoes three times daily, taken in place of other meals. One glass of water was allowed with each meal of tomatoes, and no other food of any kind was taken.

This diet was continued for exactly a month, during which time the patient lost 36 pounds in weight. A re-examination of his heart with the X-ray showed that it had been reduced at least two inches in diameter. His breathing was perfectly normal, and there was no sign of any palpitation. Since adopting a careful diet his weight has remained at about 170 pounds which I consider normal for a man of his height.

Tachycardia (Rapid Heart)

The cause of this condition is to be found in valvular leakage of the heart, which makes the extra heart beats necessary in order to disseminate the blood properly through the tissues as in an enlargement of some organ of the body such as the thyroid, or the growth of a tumor. Such enlargements are caused by the collection of waste material in the organ, which blocks the free circulation of blood through the part, resulting in an engorgement of blood and a consequent heavy, rapid pulse beat, which is essential in order to force enough blood through the body in spite of this resistance.

The cure depends upon the absorption of the deposits, which is best accomplished through the fasting methods I have explained in the articles on Goitres and Tumors. The following cases will show how quickly the heart beat may be reduced to normal:

CASE 53. Young woman, 25 years of age. Pulse 120. I found a small enlargement of the thyroid gland, and a slight valvular leakage of the heart, which would account for the rapid pulse. The patient was put on a fast, taking a glass of grapefruit juice three times daily together with a glass of water. This was continued for three weeks, during which time the pulse gradually reduced until at the end of the third week it had reached the normal, which is about 72 beats per minute. The enlargement of the thyroid entirely disappeared, and no signs of valvular heart trouble could be detected.

The patient then resumed a well-balanced diet, and has since been employed by a telephone company as an operator, after being subjected to a rigid examination, this company employing only those who can pass insurance tests.

HERNIA OR RUPTURE

The abdominal viscera are separated from the muscles of the abdomen by a smooth covering called the peritoneum. When a break occurs in the peritoneum and the intestines protrude through the opening it is called a rupture. The common location for the break is either around the navel or low in the groin. These breaks occur many times because of a sudden strain, or in the case of an accident to the abdomen. While there are no doubt some people who from birth have a thin peritoneum, and because of this are easily subject to rupture, yet the underlying causes must always be considered as the following:—

First: The distension of the peritoneum in certain places by the pressure of intestinal gas or impacted feces.

Second: A weakened state of the abdominal muscles

which should support the peritoneum and assist it in holding up the abdominal contents.

In all cases of hernia which I have examined I have found an excess of intestinal gas far above the normal, also a lack of development of the abdominal muscles. This lack of development is always present with those athletes who have suffered a rupture, and whose particular form of athletic endeavor is one in which the abdominal muscles are not brought into play. The boxer, who must have strong muscles covering his abdomen and solar plexus, never suffers from rupture, and no amount of straining will be sufficient to break a peritoneum which is so firmly supported.

I find a great many ruptures contracted by persons who were formerly athletes, and who, after years of idleness, have again attempted to take up some form of training. The first day after their return to exercising they overdo matters in attempting to perform some stunt which would have been easy enough for them at one time. Their flabby muscles however will not respond as they once did, and a tear in the peritoneum results. More danger actually exists for those who know how to do stunts but are in an unfit physical condition than for those who have never been athletes at all, and do not understand enough about exercising to be able to hurt themselves.

In the treatment of any case of hernia it is first of all important to empty the intestines completely from all fecal material, so that there will be a minimum of pressure behind the tear in the abdominal wall. In this way, when the abdominal muscles are exercised and begin holding the intestines more firmly, the break in the peritoneum will be able to close and grow together. The exercises for developing the abdominal muscles should be taken lying on the back, with the hips elevated higher

than the head. Sometimes the bed can be tilted up at one end by putting blocks of wood under the legs at the foot, so that this end is raised at least one foot higher than usual. Another method is to make a board two feet in width and six feet long, and use it by placing one end on the floor and the other on the side of the bed. This should be covered with quilts, and a pillow placed on the floor at the lower end of the slanting board. The patient should then lie on his back and take the exercises described on pages 320-321.

If it is possible to secure a suitable truss, this should be worn while the cure is taking place. Most trusses for sale on the market consist of a steel spring passing around the body which brings to bear against the ruptured part a small, hard, rubber-ball-like arrangement. These trusses will prevent the cure of the rupture no matter what measures may be adopted, as the hard rubber ball keeps the tear in the peritoneum constantly forced open, making it impossible for the edges to come together sufficiently to heal. If you search long enough you will be able to find some form of truss in which the attachment that presses against the rupture is shaped larger and flatter than the ball attachment. There is an ideal support being manufactured in Los Angeles which holds the rupture as easily as can be done with the hand, but I do not know of any other suitable form being made elsewhere in the United States which is so perfect. As I have many patients in various parts of the country being treated by correspondence and advice, I would welcome any information readers can send me regarding a suitable truss which can be purchased in other parts of the country. The name of the Los Angeles manufacturer will be gladly furnished upon application.

As the exercises recommended are continued, the patient must be specially careful to avoid overeating, and

to regulate the diet in such a way that there will not be an excess accumulation of gas in the intestines. If these methods are followed a hernia may be cured at any age, and there is no way of telling whether a cure is impossible or not unless a strict regime such as outlined above is followed for several months. I have found patients of an advanced age who were cured as rapidly as younger patients, after having been ruptured for many years. It might be thought that after a long interval it would be impossible for the edges of the tear to heal, but actual practice has shown that neither the age of the rupture nor of the patient having it makes any material difference.

CASE 54. Man, 36 years of age. A few days before coming to me he had discovered a lump forming in the lower right groin, and consulted a surgeon who advised an immediate operation. As the patient's wife was expected soon to give birth to a child, he feared the nervous shock which might be given her if he were forced to undergo a surgical operation. Accordingly he came to me for treatment, because he happened to know of a case of rupture which had been cured by my methods.

He was started immediately upon a fast, using as much water as desired during the day, but no other liquid or food of any kind, and continued this fast for two weeks. At the end of that time the abdomen had lost its distension, and the rupture could not be seen. The patient was then put upon a carefully selected diet, such as given under the article on Constipation and was advised to start in with the exercises for the development of his abdominal muscles, as explained in the first part of this article.

After being on this diet for a few days he was advised to have a truss fitted by the truss maker I have men-

tioned, in order to give more support to that part of the abdomen where the tear had taken place. He continued wearing the truss for several weeks, and increased his exercises until his abdominal muscles were as strong as a boxer's. As a precaution against intestinal, fecal, or gas pressure, I advised him to take one enema daily, which he did for some time until his bowel movements became so frequent that this was no longer necessary.

After several weeks of exercising I was not able to discover any evidence of the hernia by the most careful examination, and it has shown no signs of returning. This cure was effected about three years ago, and the patient has long since discarded the truss, having now every appearance of being entirely cured.

INSOMNIA OR SLEEPLESSNESS

Eight hours of sleep appear to be required by the average adult as the proper period for relaxation, and if a longer time is necessary it is usually because of the enervation produced by overwork or destructive habits. If the hours of work are not too long, sufficient exercise is taken, and correct dietary rules followed, you will find eight hours of sleep to be sufficient, and even a shorter period will often suffice.

The theory has been advanced that if the right balance could just be struck, and man could divide the hours of the day into exactly the right amounts of exercise, of study, and of relaxation, no sleep would be required at all, but this seems hardly possible or even probable at the present stage of evolutionary development, because of the necessity for working so many hours at a time that the body becomes tired enough to require sleep. There are, however, a few animals that hardly sleep at all, and many more that sleep only occasionally, apparently getting the same benefit by simply resting.

In man, then, sleep is a state of self-hypnosis which he himself induces, during which time the forces of the body are able to repair broken-down cells and tissues which have been injured in the course of a strenuous day's work, and which also permits the body to recover from the poisoning caused by excess of food, and the toxins produced by inharmonious combinations of the same. If one is not able to relax into this state of sleep, it is either because of psychological or mental disturbances, or because of certain physical irritations which keep the mind of the patient conscious of the physical body.

A person who is not able to stop thinking actively about business or who worries over troubles, will often develop a chronic state of insomnia which develops into a habit, easily corrected however if proper mental changes are made. The most common cause of insomnia is no doubt the irritation produced from indigestion, and the pressure of large quantities of gas in the stomach and intestines. I find many patients who have been restless at night and unable to forget their troubles, able to enjoy a refreshing sleep in a day or two after starting on a fast, with enemas to cleanse the stomach and intestines of the accumulation of fecal material, that is to say most of those who think they are troubled with insomnia because of a nervous mental state, are really being irritated physically by the pressure of impacted feces and gas in the colon, but which has not been sufficiently pronounced to make them conscious of it, since no pain has been experienced.

No matter what the cause may be that is keeping the patient awake, it is always advisable to place a hot water bottle at the feet upon retiring, in order to attract more blood to the lower extremities, and so withdraw it from the brain

I have never known a case of insomnia that could not be easily cured by using a combination of the treatment for removing stomach or intestinal irritation, the patient meantime taking an increased amount of physical exercise, and the use of some simple mental suggestions upon going to bed. After you are sure that all physical irritation has been removed, learn to suggest sleep to yourself in much the same way as the hypnotist does to a subject. Lie perfectly relaxed, and mentally repeat over and over the words, "Sleepy, sleepy, sleepy," or "Drowsy, drowsy, drowsy." Inhale and exhale slowly, without much effort, keep mentally repeating over and over one or both of these words, and you will find that the conscious mind can be very easily lulled into a deep sleep. If this method is persisted in, it never fails to bring about the desired result.

No matter how much mental work has been done during the day, and how tired you seem to be at night, it is nevertheless a singular thing that physical culture exercises will re-energize the body, and much less sleep will be required by the brain worker if he will but try this.

CASE 55. Woman, 35 years of age. She said that for several years she had been waking up about 1 or 2 o'clock in the morning, and sometimes was unable to go to sleep again after that time. Had been taking bromides off and on for several years when the insomnia continued for too long a time, and in this way drugged herself to sleep for a few nights at a time.

Upon examination I found a tendency to gastritis, and during the examination with the test meal large quantities of gas formed in the upper part of the stomach, which pressed against the diaphragm. She had not been conscious at any time of having any stomach or intestinal derangement, as the gas pressure which existed in her

alimentary canal had not been causing enough discomfort to attract her attention.

After the examination she was advised to take a large dose of castor oil, using four ounces of castor oil with four ounces of orange juice. This was taken about four o'clock in the afternoon, and at both six and nine o'clock in the evening an enema was taken. This, together with the frequent movements induced by the castor oil, completely emptied the alimentary canal of all food material, and the patient was able to sleep that night without waking at 1 a. m. as she had been accustomed to do.

I find that those patients who are in the habit of waking at 1 or 2 o'clock in the morning are, in every case, troubled by gas pressure in the stomach caused by the remains of the evening meal which has not left that organ, but is fermenting and producing the extra gas.

The morning after the castor oil treatment the patient started on a fast of orange juice and water, taking a glass of orange juice with a glass of water three times daily. This was continued for one week. Two enemas daily were taken. At the end of the week of fasting the patient was placed upon a regulated diet similar to the one given in the treatment of Gastritis. She was also advised to take calisthenic exercises twice daily, and to walk a mile in the middle of the morning, during the afternoon, and again after dinner. Exercises were increased by degrees, and a general diet gradually resumed. She has never had a return of sleeplessness since her tendency to flatulence was removed.

CASE 56. Woman, 53 years of age. Was unable to go to sleep at night, and after lying awake for several hours would get up, dress, and take a long walk, in an attempt to tire herself out, so that she could relax enough to be able to sleep. This course, however, did not seem to have

been productive of very good results, and after she came to me as a patient she was put upon a short fast, followed by a simple diet, in order to get her alimentary canal into the best possible condition. Exercises were prescribed which she followed faithfully, but although she was able to get more sleep than before, it was still insufficient to give her the amount of rest that she seemed to need.

Because of her opposition to everything which savored of mental healing I had difficulty in inducing her to try the self-hypnosis treatment outlined in the earlier part of this article, but as I was convinced that she was allowing her mind to remain too active, I kept insisting upon her starting this treatment by suggestion, and after repeated attempts she finally succeeded in getting the suggestions to work well enough to be satisfied as to their efficacy. Night after night her sleep became deeper, until she was finally permanently cured, and she has remained so now for over three years.

KIDNEY STONE

The first symptoms which will be felt when a stone has formed in the kidney will be sharp, shooting pains from one side or the other around from the back to the bladder. The pains resemble closely those associated with gall-stones, and are also similar to those produced by intestinal gas. They are caused by the injury to the kidney or ureter inflicted by the stone in attempting to pass into the bladder.

The stones themselves are formed of various alkaline materials, which solidify in the urine and become masses of crystals and which, on removal, are often found to be hard enough to cut glass. An operation is usually advised, but I have handled many cases of this trouble and have never been forced to recommend surgical interfer-

ence. I have found that in every case, under a strict fasting regime, the kidney stone may be dissolved sufficiently, so that the pieces will pass down the ureters into the bladder, and finally out through the urethra.

When this dissolution takes place great pain will often be experienced as the particles are attempting to pass through the small openings, and the sufferer must be patient to stand the terrific cramps and spasms from which there is seldom any escape until the pieces pass out.

A fruit juice fast is always to be recommended as the acid fruit juice seems to have a specific effect in dissolving the alkaline concretions. Patients are advised, after recovery, to drink large quantities of water, to use a small amount of starchy food, and to indulge in more vigorous physical exercise.

CASE 57. Man, 50 years of age. I was called hurriedly to his house, and found the patient suffering great pain from kidney stone. For several days he had been kept under opiates. A number of physicians had declared his case incurable without an operation, believing that the stone was so large that it could not be dissolved. The patient had been fed different kinds of "light" food, but under my advice this was discontinued, and he was put on a fast of plain water, with the juice of half a lemon added to each glass. This was taken every half hour from the time I called in the evening at 9 o'clock, until the pain had partially subsided, which was about 9 a. m. the next morning, when the patient fell into a refreshing sleep which lasted for several hours.

By the afternoon the pain had lessened sufficiently to permit of his being brought to my office, where an X-ray picture was made of the kidney, which confirmed my diagnosis of kidney stone. The patient was advised to continue on the lemon juice fast, and did so for several

days. At the end of the fifth day of the fast all kidney pains disappeared, but the fast was continued for five more days, and the patient then put on a general diet. Of course hot enemas were used several times daily during this fast, and the patient was encouraged to drink an extra amount of hot water over and above the regular doses of lemon juice and hot water each half hour.

At the end of twenty days from the time the X-ray picture showing the presence of the kidney stone was taken, several other pictures were taken in none of which was it possible to find any evidence of the stone. There have been no symptoms since that time, now almost a year ago, and the patient has remained well in every way.

I find it frequently the case that the kidney stone will be dissolved into such minute particles that there will not be any pain as these particles pass through the body, if a large amount of water is used by the patient, with the addition of the lemon juice. This seems to dissolve the stone so finely that no irritation is produced.

MASTOIDITIS

This disease is characterized by an inflammation of the mastoid process which lies behind the ear. This process is a hollow part of one of the bones of the skull, and in certain cases it sometimes happens that this hollow space becomes filled with pus. This gathering of pus in the ear of a patient only takes place when the body of the patient contains an accumulation of waste products and poisonous material.

The disease is quite common among children who have been fed an overabundance of sugars and starches. A slight earache, improperly treated, will often be the irritant that will cause the blood to deposit its poisons in the mastoid process in the form of pus. A surgical

operation is usually advised to drain this pus from the cavity, but after successfully handling many serious cases of mastoiditis I am convinced that it can almost always be cured by making use of the absorbing power of the fast.

No matter how young or how old the patient may be who comes to me with an earache, he is immediately put upon a strict fast, to ensure the immediate start of an absorption of pus, if any exist in the mastoid process. This is always a safe procedure to adopt in the case of any form of earache, and parents will do well to note this point, as earache is one of the commonest symptoms of children's diseases.

Applications of hot towels or radiant light therapy should be used on the neck and upper back, in order to assist the circulation of blood going to and from the head. The patient should be confined to bed, and be made to lie as quietly as possible, with a hot water bottle at the feet. If warm olive oil is poured into the ear of the affected side, it will often assist in relieving the earache symptoms.

After the acute symptoms of the disorder have subsided, it will be necessary to follow a strict body-building regime, with an increased amount of exercise and a properly regulated diet, so that the blood will be clean and free from any toxins which might cause trouble in the future.

CASE 58. Little girl, 2 years of age. Had suffered from an earache for two days, and the eardrum was finally lanced by a physician who was called in during the night. The earache continued, and gradually located behind the ear in the mastoid process. The physician in charge of the case, who was an ear specialist, advised an operation, after having had charge of the case for about

five days, and seeing no change for the better. The mother had been a patient of mine at one time, and appealed to me in the hope that something could be done to avoid so serious a step.

The baby was at once put upon a fast of water flavored with small amounts of orange juice. Three enemas daily were used, and hot applications administered to the upper part of the child's back. No treatment was given to the ear itself, because the eardrum had been ruptured, and I did not think it advisable to use either warm water or oil in the ear, although I did employ the radiations from an ultra-violet light lamp.

On the second day of the fast the discharge from the ear stopped entirely, and on the next day all symptoms of pain in the mastoid process completely disappeared. The baby was kept on the fast for a whole week, in order to make certain of a complete cure, and since that time has been using a diet such as I recommend as suitable for children. (See chapter on Children's Diet.) This cure was effected about a year and a half ago, and although the child had previously been subject to frequent ear-ache, there has been no sign of any such symptom since that time.

CASE 59. Boy, 10 years of age. Developed a double mastoiditis, that is inflammation of both mastoid processes. When I first examined him his temperature was 102 degrees, and both ears were discharging large amounts of pus. An immediate operation had been advised, but I did not think this necessary, and started the boy on a strict fast of water flavored with lemon juice. Both ears were treated with strong radiations from the ultra-violet light, and the fast was continued for twelve days.

After the third day of the treatment all discharge in the ears ceased entirely, and the aching in the mastoid

processes entirely disappeared the next day. At the end of the fast the patient was put upon a well-regulated diet, being careful to avoid an excess of starchy foods. Since that time, now about three years ago, he has had no return of the trouble.

OBESITY

This chapter will interest many who are conscious of carrying around too much weight—who are stuffy, short of breath, sleepy, and uncomfortable, and who have been told by a physician that they should reduce their avoirdupois. I hope that many others will benefit from the advice given, who believe they are healthy because they are rotund, whose friends say they look so well, and who think that health can be measured on the scales.

It is a significant fact that fat does not mean health, and really has no connection with physical soundness. Often the obese individual will have good assimilative power when really suffering from a hidden disease, partially caused by that very fact. The proper weight for the best mental and physical vigor is often far below that of the patient's ideal, and can only be determined after careful examination, using every hygienic and dietetic method in an attempt to discover the normal. Excess weight is always a decided disadvantage to the patient who is also experiencing some other ailment at the same time. It is folly to attempt to arrange a table of normal weights for certain heights, etc., as there are as many types of individuals as there are shapes of heads and faces.

With a great deal of experience in handling cases of obesity, I find it is often possible to guess approximately the best weight for a patient, but so many factors must be taken into consideration that such an estimate must

always be subject to change. Often fat will form only at certain parts of the body where the circulation is poor, or when sufficient exercise is not used for that part, so that especial attention must be given to that section in the process of weight reduction, without attempting to reduce the parts which are normal.

There are, no doubt, two general types of obese patients:—

1. The one who comes from a family of fat people, who seems to gain weight from almost every food eaten. These people usually have the habit of inactivity also, which is as hard to cure as the tendency to retain weight from their food. In these cases the weight may be easily reduced if the patient will develop the mental ideal of a symmetrical body, and do everything to attain that ideal. They must be impressed with the fact that the proper kind and amount of food must be eaten and sufficient exercise taken. Often the actual bodily requirements are very slight, and the patient can have perfect health and normal weight on a very small portion of the proper tissue-building food.

2. The second class of fat subject with no natural tendency to obesity, has gained weight through overeating of starch and sugar and fats; that is, eating large amounts of candy, rich gravy, pastry, etc. In such cases weight is only caused by gross indiscretion in diet, and gorging with those foods which are weight producing. While those with a predisposition to obesity must train hard to reduce, this second class have only to stop their dietetic errors to return easily to the normal.

TREATMENT. In either case the permanent cure depends upon the regulation of the diet so as to use only the amount of food necessary for the repair and building up of the normal tissues of the body, and no excess should be

taken above this requirement. The quickest and most infallible method of reducing the weight to the normal is the use of the fasting cure in some form. Fasting with small amounts of water and the juice of citrus fruit is perhaps the best procedure for the average case. As will be seen in the cases given below, the weight will be reduced from one-half pound to two pounds daily, and with marked improvement in all the physical functions.

An apparent increase in energy will be noted, which is caused by the body being free from the burden of encumbrance. The mind power will be strengthened, and ordinary occupation may be pursued with increased vigor. Deep breathing exercises should be taken at this time, which will produce more complete oxygenation of the fatty deposits and increase the amount of reduction to a large extent. Physical culture exercises should not be used during the fasting period, as too much muscular tissue will be used up which will not be replaced until proteid food is again taken. Drink enough water to keep the urine from becoming too heavy, as this puts an unnecessary burden upon the kidneys.

More loss of weight will take place if the amount of water is kept to the minimum of tolerance. Friction rubs and sponge or shower baths will keep the skin stimulated to eliminate freely. Massage is helpful and certain electrical treatments will aid the blood's circulation, and materially help in the reduction. Heavy vibration over the fattest parts will break down the fat cells and assist in producing a more symmetrical reduction. The bowels are to be kept open by enemas twice daily, of plain warm water. No laxatives are necessary or advisable. The fast may be continued from one to several weeks, according to the needs of the patient, but those attempting the reduction treatment at home without competent supervision may rest assured that two or three weeks of fast-

ing will not be too long for perfect safety, and this length of fast may be broken without danger if the instructions given in the cases below are followed to the letter.

The diet following the fasting period must be selected carefully, and the foods which are especially weight-producing must be entirely eliminated until a condition near the normal is reached. If the proper amount of proteid and green leafy vegetables are used, the body will be supplied with all the elements essential for the perfect growth of the necessary cells and tissues.

The body may be well sustained for years without any sugars, starches, or fats, if enough proteid is used, together with those non-starchy vegetables containing the essential organic salts and vitamins. The energy which would be derived from the carbohydrates and fats can be taken from proteids as easily. Some of the longest-lived, most active and energetic carnivorous animals and birds never touch an ounce of carbohydrate food, and man can adapt himself to a properly balanced carnivorous (meat) diet if it is necessary, without any harm, and often with great benefit. After a sufficient period of time, the carbohydrates and fats may be slowly introduced into the daily rations, when it will be found that there has often been a permanent cure of the tendency to assimilate too much of these weight producers.

After the fast, physical culture exercises and increased walking should be introduced, and the deep breathing exercises continued. A protruding abdomen can only be reduced and strengthened by vigorous exercise of the abdominal muscles, so do not expect to have a flat abdomen or perfect symmetry of any part of the body if you do not take sufficient exercise to have a definite effect upon those parts which need more strength and a better circulation. Massage and vibration should be continued as long as possible.

Have the ideal of a beautiful body constantly in mind and take pride in making that ideal come true. Visualize beauty of form and look at pictures of well formed men and women, such as are shown in the Physical Culture Magazine, and other publications which encourage physical beauty.

You will find this suggestion really of very valuable help to you in holding yourself to the task in hand. Try to go to a gymnasium at regular intervals and be helped by the inspiration such as the contact with athletic men and women will give you. Your age can never be a handicap to you, for you may develop a beautiful body at any age, and those who have never taken up physical culture seriously will have a surprise in store for them when they find that their bodies may be made a truly fitting Temple of the Soul.

CASE 60. Woman, 67 years of age. Weight 208 pounds. Had started to develop arthritis deformans, which is a form of rheumatism, enlarging the joints and twisting them out of their natural shape. Her ankles hurt when she walked, and her legs were swollen with dropsical enlargement.

A fast was advised, and she was recommended to take the juice of one orange every two hours, with a glass of water each time. This was continued for thirty days, during which time her weight was actually reduced to 168 pounds. On a diet comparatively free from weight-producing foods she has gradually reduced during the last eight years, until on the day this article is written her weight is 136 pounds. The deformity of the joints was checked from further development, and she now has the appearance of a woman twenty or thirty years younger than she really is—being at the present time seventy-five years of age. Her skin is as firm and pink as that of a young girl, and she is in excellent health.

CASE 61. Male, 35 years of age. Professional concert singer, and one of America's leading tenor soloists. Weight 229 pounds. Careful examination of this patient disclosed no organic disease. He had been greatly troubled with abscesses forming in his ears which had to be lanced from time to time, and his throat bothered him continually on account of enlarged tonsils, which constantly interfered with his singing voice.

He was advised to take a glass of orange juice three times daily, with the addition of a glass of plain water, and to drink no other liquids or take any other food of any kind. One enema daily was taken during the length of the fast, and two cold water baths daily. This fast was continued for fifteen days, by which time the weight had been reduced to 198 pounds. This weight has been retained for some time upon the following diet:—

- Breakfast—1 Coddled egg.
 2 Pieces hard, thin, brown toast.
 Dish of prunes.
- Lunch— Choice of one of the following raw fruits:
 Peaches, pears, grapes, or 1 glass of orange juice.
 1 Glass water.
- Dinner— Choice of one of the following: Lean beef,
 mutton, chicken, turkey, Belgian hare, fish.

Choice of one of the following cooked non-starchy vegetables:

Summer squash	Celery
Small green string beans	Swiss Chard
Spinach	Asparagus
Egg plant	Oyster plant
Beet tops	Turnip tops
Kale	Mustard greens
Cucumbers	Chayotes
French artichokes	Parsley
Zucchini or Italian squash	Lettuce

Choice of one of the following raw or salad vegetables:

Watercress	Celery
Asparagus	Parsley
Cucumbers	Lettuce
Spinach	Endive
Tomatoes	

He is now following this diet regime, and is slowly reducing his weight until it becomes normal, which I think in his case will be about 175 pounds. The tonsils have been reduced to normal size, his voice is clearer than it has ever been, and there has been no sign of any trouble in his ears since the date of the fast—nor will there be if he continues to live in accordance with the instructions given him.

PROLAPSUS, OR SAGGING OF ORGANS

Most of the vital organs of the body are attached by the ligaments to the spine, and if man walked on all fours the organs would hang from the spine in the same way as they do in any of the monkey family. Primitive man no doubt assumed a posture similar to that of the apes most of the time, and it is quite evident that modern man has only developed an upright position gradually, because of which those organs attached to the spine have by degrees sagged lower down in the abdomen. Abdominal adjustments or modifications have taken place to take care, to a certain extent, of this shifting of the organs, but where great weakness exists in a patient, or the muscles of the body are allowed to degenerate by disuse, this prolapsus has become more and more pronounced, so that one organ is lying on top of the other, and all are being pressed further and further down into the basin of the pelvis.

Those who are forced to work where they are constantly standing on their feet, will be found almost always to have an abnormal prolapsus of stomach and intestines. In woman the uterus is usually out of the normal position. From time to time I have had patients who were classical dancers, and in every case I have examined so far the stomach and intestines have been prolapsed several inches. This is also true of those who do much horseback riding.

Where the body is weakened and enervated with any other disease, that condition of weakness of the nerves must be removed and the disease cured, before you can hope to bring about a change in the position of these internal organs. When the patient is in a condition to develop strength, certain calisthenic exercises should be used, mostly while lying on the back on the floor. I refer you especially to those on pages 320-321. These exercises, if persisted in twice daily, will so develop the abdominal muscles and those on the entire front of the body, that no matter how much out of position the organs may have sagged they will gradually be brought back into their normal places.

The body must be developed more strongly, and the muscles must be made larger than would be necessary if we were walking on all fours; in fact in order to hold the organs in position and walk in the upright posture it is necessary to develop the abdominal muscles almost to an abnormal extent. In this way the stomach, intestines, and uterus are held up in such a position that they can function properly, and one will not interfere with the free action of another.

CASE 62. Woman, 68 years of age. At the time of the examination, and for several years previous, the uterus had been so prolapsed as to protrude several inches outside of the vagina, with the result that an oil bandage

had to be worn to hold it up sufficiently to enable the patient to walk. An operation had been advised by many physicians, but the patient would not consent. The physician who advised the operation said that apparently there had been a tearing loose of some of the ligaments attached to the womb when the last child was born, which happened when the woman was 42 years of age, and that because of this tearing she could never expect to have the womb return to its normal place by any other means than a surgical operation, when the organ would be sewed to the abdominal wall.

I found the stomach and intestines prolapsed as low as possible in the pelvis, and told the patient that although an operation might be necessary eventually, it would be advisable to strengthen her abdominal muscles sufficiently to raise the stomach and intestines to enable me to determine whether the womb could be restored to the normal position or not.

The patient was put on a fast of orange juice and water, taking the juice of an orange every two hours with a glass of water, and taking two enemas daily. This was continued for 32 days, during which time the patient lost nearly 30 pounds of weight. After the fast the following diet was prescribed:—

- Breakfast—Glass of orange juice and a glass of water.
- Lunch— 2 Coddled eggs.
Choice of 1 non-starchy cooked vegetable.
Choice of 1 salad vegetable.
1 Stewed fruit.
- Dinner— 1 Proteid food, selected from the following:
Lean beef or mutton, fish, turkey, chicken,
Belgian hare.
2 Non-starchy vegetables.
1 or more salad vegetables.

After a few days of this diet the patient was instructed to take calisthenic exercises, especially those to

be practised while lying on the back, as described on pages 320-321. Her diet was gradually increased as seemed advisable, and she was instructed to take short walks several times during the day.

After continuing on a general body-building regime for six months, I again examined the patient with the X-ray, and found that the stomach and intestines had nearly resumed their normal position, but the uterus still protruded slightly from the vagina. The patient was sufficiently discouraged to believe that she could never avoid the necessity for the operation which she dreaded. I advised her that no matter how slow the cure seemed to be, she should continue to do exactly as she had been doing, and that eventually the organ would be raised enough to make her comfortable.

She was finally persuaded to continue the exercise and diet treatment at home, and accordingly went back to her own residence which happened to be in another town. At the end of a month, when she returned to me for examination, I found that the uterus had returned to a perfectly normal position, and that her stomach and intestines had also been raised to their proper places. The preparatory treatments during the first six months, it should be explained, were strengthening and preparing the muscles of the abdomen for what might be called their new duties, so that quite suddenly during the seventh month the uterus returned to its normal position. She has remained perfectly well for over six years, and is now 74 years of age.

From my experience I am satisfied that a woman of advanced years can develop her abdominal muscles just as easily as a young girl. This is probably due to the fact that the particular abdominal muscles which are developed and brought up by the special exercises I recommend, have never before been used during the

patient's life, but have been lying dormant awaiting development, and consequently might be said not to be worn out to the same extent as some of the other muscles of the body.

CASE 63. Woman, 32 years of age. One of the best known classical dancers on the American stage. She had suffered from prolapsus of the uterus, and during her dancing career had been forced at times to wear a certain kind of metal pessary, which is a device used for holding up the uterus in the worst stages of prolapsus. Sometimes the trouble became so pronounced that she was unable to continue her theatrical engagements. As dancing is so frequently recommended as a good exercise it had always puzzled her as to how this prolapsus could exist with the vigorous training she had undergone, and the constant practice of dancing exercises.

I assured her that those muscles of the abdomen which were used by the body to hold the vital organs in position were not sufficiently exercised by a classical dancer to be able to overcome the violent jars the body was constantly subjected to during certain parts of the dances, where leaps, etc., were indulged in. I showed her how her back muscles and the muscles of the thigh and the calf were very well developed, but that the abdominal muscles were so weak that while she was standing in an attitude of repose there was such a prolapsus of the abdominal viscera that her abdomen protruded several inches beyond the normal.

After going through a treatment with a short fast and diet regime she was instructed to take those abdominal exercises already referred to in the last case under discussion, and she continued taking them three times daily for about three months, which happened to be her vacation period. By the end of that time the uterus was

in its normal position, and the abdominal muscles were so strong that there was no protrusion or sagging of the abdomen, while another X-ray examination at that time disclosed the fact that her stomach and intestines had returned to their normal position. She felt fine in every way, and was relieved of many symptoms such as headaches and nausea and pains in the legs from which she had previously suffered because of her disorder.

She assured me that she would add those exercises which I had given her to the ones she was already taking in her regular dancing work, and apparently she has done so faithfully, for she has remained perfectly well and without any sign of prolapsus for more than five years.

RECTAL TROUBLES

The rectum is the lower portion of the large colon where the feces accumulate just before the bowels are ready to move. Those who are forced to strain at the stool to produce evacuation of the bowels will sooner or later develop an irritation around the exit from the colon, which will be evidenced at first by a burning and often a stinging sensation, and finally by bleeding. Often this straining and the congestion caused by constipation will produce enlarged veins at the opening, which will protrude. The rectum is also irritated by the poisons of the body which are thrown out with the feces, and if these poisons are of an especially virulent nature sufficient burning might be set up to make the membrane quite raw and inflamed.

The frequent use of laxatives is also an important factor in the cause of rectal irritation, both by the irritating effect of the medicine itself, and also because of the burning of the membrane produced by an excess flow of bile, which is often induced by the cathartic or laxa-

tive. The membrane will sometimes develop a break which is called a "fissure" and which is very painful and annoying. Sometimes this condition will force a false opening from the rectum and produce a pocket in which infection takes place.

Any of these irritations will produce nervous symptoms and reflex disorders in other parts of the body, which often seem to have no connection with the rectal trouble. If a patient is being bothered with any form of nervousness it is imperative that all irritation at the rectum should be removed before a complete recovery can be expected.

The treatment for all disorders of this nature must first of all be constitutional and not local, that is, the first requirement is to see that constipation is overcome and that the body is as quickly as possible freed from all of the poisons which have been lodged in the intestines, in many cases for a long time.

No matter what kind of rectal disorder is present, some form of fast should be started at once, and two or three enemas taken each day to ensure a thorough cleansing of the large colon. When so many enemas are used it is advisable to lubricate the rectal opening with some kind of oil, in order to avoid irritation by the frequent passage of water and feces.

After a full diet is resumed, of the kind I usually recommend after constipation, it is then advisable to start using local treatments to the rectum itself. Probably the best local treatment which is applicable to every class of rectal disorder is the following: Break off a small piece of ice in the shape of a cone, and insert this carefully into the rectum, holding it securely with a towel. See that the piece is large enough to take three or four minutes to melt. Apply this two or three times

daily, and if convenient several more of such treatments may be taken each day with increased benefit. This ice treatment will contract any enlarged veins, and will also aid the rectal muscles in recovering their normal tone.

After the enema is taken at night the ice treatment should be used, and then a glycerine suppository or a piece of coco butter should be inserted in the rectum and allowed to remain overnight. Before rising in the morning insert another piece of coco butter, and allow it to melt. Follow this with an enema, then the ice treatment, and then another glycerine suppository or piece of coco butter. This should be continued until the constipation is overcome, and when the bowels are moving freely twice daily continue to insert a glycerine suppository just before the bowels move, in order to lubricate the rectum and make an easier passage. After the stool, use the ice treatment as directed.

As soon as all symptoms disappear of course it is not necessary to continue this treatment with suppositories or ice, for if the patient will live on a non-constipating diet and otherwise take good care of himself, there will not be a return of any local trouble.

CASE 64. Man, 35 years of age. Had experienced several attacks of hemorrhoids during his life, and in the attack before the last one he had resorted to surgical measures for relief. When I was called in during an acute attack, he believed his condition to be worse than it had ever been. He was unable to walk because of the great pain which had persisted day and night for several days before I saw him. He had been using hot applications, but these did not seem to afford him much relief.

I immediately advised ice treatment to be used at once in order to shrink up the enlarged veins and hemorrhoids which were protruding, and at the same time

almost entirely closing the rectum. This brought about immediate relief, and enemas were taken every two hours, a quart of warm paraffine oil being used in place of water, in order to make the passage of feces as easy as possible. After several hours of this treatment the patient was able to walk without any pain, and the next day he came to my office for a more complete diagnosis.

I found his intestines in a prolapsed, kinked-up condition, and also found several other functional disturbances in the body, for which immediate treatment was started. A fast was recommended, using only plain water, and from that time on two warm water enemas daily were advised. The patient continued on this fast for ten days, after which the diet was similar to the one recommended in the article on Constipation.

The ice treatment was continued several times daily, but by the end of the fast all signs of the hemorrhoids had disappeared, and the rectum seemed to be in quite a normal condition. However, because of the severity of the attacks he had experienced, and in order to make sure of a permanent cure, the ice treatment and the glycerine suppositories were used twice daily for about a month after the fast was completed. His constipation was entirely overcome, and he has not had a return of any rectal disorder for more than two years.

RHEUMATISM

The tendency to rheumatic diseases is more common among those who overeat, who are overweight, and are "full-blooded." Mild attacks of muscular rheumatism may occur with these people if they are subjected to exposure or cold, when the circulation of fluids in the body becomes congested and the elimination of toxins retarded. The congestion may occur in the muscles, and

in such cases the trouble is called "muscular rheumatism." This condition may exist for years, with varying attacks of shooting pains and soreness of the muscles, until finally the congestion of toxins locates in some joint of the body. The fingers and toes are usually affected first, but it often spreads to the elbows and shoulders, and in this stage is called "articular rheumatism."

If the disease is not arrested at this stage the soreness spreads to the hips, and finally to the spine. In this latter stage it is most serious. Every effort must be exerted by the patient to attempt to keep the inflammation from developing to this dangerous point. If the rheumatism in the joints continues, the bones will throw out a liquid bone formation which will solidify around the joint, apparently in an attempt by the body to protect the joints against the irritation of acid toxins in the blood. This produces enlargement of the joints, twisting them out of shape, and producing a disease called "arthritis deformans."

The muscular form of rheumatism is usually to be found in the lower back, over the lumbar section of the spine, where it is called "lumbago," or in the muscles attached to the ribs, in which case it is called "intercostal neuralgia." If the inflammation extends to the nervous system, and deposits of irritating material accumulate around the nerve trunks, it will develop the disease commonly called "sciatica" or "neuritis." Real neuritis is an inflammation of the nerve cells, and is a very rare disease, but rheumatism of the nerves of the arm is so often called neuritis, that I am simply referring to this form of the trouble by the name under which it commonly passes.

One of the principal causes of rheumatism is toxemia produced from the fermentation of an excess of carbohydrate foods, or from poison generated by fermentation

when these foods are used in wrong combinations. In the treatment of any form of rheumatism the use of the fasting cure will be found to be the means of getting the quickest results possible, owing to the fact that the blood stream during the fasting period cleanses itself from all of these toxins which set up irritation in the muscles or joints, or in the nerve trunks, and are thus responsible for every form of rheumatic disorder.

In the treatment of muscular rheumatism the use of hot applications over the parts is of great value in freeing the congested circulation. Often one or two immersions daily in a tub of hot water to which has been added a handful of epsom salts, will aid in bringing about a rapid recovery; but usually the muscular soreness will leave in two or three days after beginning the fast.

In articular rheumatism great benefit will be experienced at the start of the fast, but a complete cure cannot be expected for a considerable period of time because of the bone changes taking place, and the necessity for the solidification of all of the liquid bone which has been thrown around the joint before the fast was started. You may expect the permanent cure to take at least as long as it would take a broken bone to heal. With this form of rheumatism it is always well for the patient to keep reasonably quiet, so as not to irritate the joints too much while they are attempting to heal. While lying in bed or sitting in an easy chair the feet should be kept constantly warm by means of a hot water bottle or electric pad. This will keep the circulation almost as good as if the patient were exercising, and still there will be no irritation of the joints.

In addition to the toxic condition of the blood being a cause of sciatica, it will often be found that a certain amount of pressure is being exerted upon the nerves going to the legs by an impacted feces in the rectum, or

by the pressure of gas on one or the other or on both sides of the colon. If a tumor exists in the womb this may be an irritating cause of pains in the legs because of the pressure exerted upon the pelvic nerves. If the gas pockets in the colon exist only on one side, it will be noted that there is a poor circulation in the leg on that particular side, often enough to produce sciatic pains, so that in the treatment of sciatica it will always be found of advantage to use frequent enemas, taken while sitting on the toilet, to free any congestion in the pelvis which may be caused by an accumulation of feces or gas.

CASE 65. Male, 54 years of age. Came to me suffering from rheumatism in the left shoulder. Several doctors had told him he would never be able to raise his arm again sufficiently to be able to work at his occupation as a rancher. Because of the fact that all efforts to cure the rheumatism in the shoulder had failed, the last doctors he consulted advised him to stop using his arm entirely, and allow the bones of the shoulder to grow together. This advice was given because they considered the disease articular rheumatism, for which ailment they had no hope of a cure.

The patient was immediately started on a fast of water and lemon juice, drinking at least one glass of water every 30 minutes all during the day. He was advised to add to each glass the juice of half a lemon. This fast was continued for 20 days. By the tenth day of the fast, without any treatment being applied to the shoulder, he had sufficiently recovered to be able to work eight hours a day picking lemons. In picking lemons the worker reaches up and holds the lemon with the left hand, while cutting it off with clippers held in the right hand. In this way the left arm is raised higher than the right, and generally it is necessary, in reaching for the lemon, to hold the

hand at least a foot above the shoulder. This he was able to do without any apparent discomfort beyond the fact that his arm was weak from long continued disuse, and on this account he was obliged to rest this arm every now and then, although after the tenth day of the fast no pain whatever was present.

The fast was, however, continued for ten days more, after which the patient was put upon a well regulated diet, and has continued to be well for over seven years, with no sign of a return of any form of rheumatism. You will note that in this, as in other cases treated for rheumatism, I advised a large amount of acid fruit juice to be used in the fast, as this seems to hasten the cure. While there is no doubt that one of the dietetic causes of rheumatism is often the indiscriminate use of fruits with other foods, nevertheless in spite of this fact, when the fruit juices are used in the fast by themselves, without any other food, recovery always seems to be more rapid.

CASE 66. Woman, 45 years of age. Had suffered from some form of rheumatism all her life, and by the time I was called in on her case she had been confined to the house for over ten years, for weeks at a time being unable to leave her bed. The disease had reached the stage of arthritis deformans, and the fingers were twisted out of shape, with very little movement to the elbows and shoulders. The ankles were swollen to about twice their natural size, and a great deal of bone change had taken place, greatly enlarging the joints.

She immediately started upon a fast, using the juice of one orange every two hours, together with a glass of water. She was also advised to take a glass of water every 15 minutes during her waking hours, and as she was unable to come to the office for treatment, no local treatments of any kind were given except bathing the

feet in hot epsom-salt water and having a hot-water bottle constantly at her feet. Two enemas daily were taken.

At the end of one week of this fast the swelling had reduced so materially in the ankles, with a corresponding decrease of soreness, that she was able to walk three blocks to a street car and ride several miles to my office, where she started taking a course of treatments with electro-therapy and radiations from a powerful therapeutic light. This was the first time she had been able to come downtown for over ten years. From that time on she improved rapidly, and was able to come to my office daily for treatment. The fast was continued for 21 days, and then the following diet was advised:—

Four times daily one-quarter of a pound of Salisbury steak, with either raw tomatoes or celery.

Half an hour before this meal was to be eaten, she was advised to take a pint of hot water, and again to take a pint of hot water with the meal, besides drinking as much water as possible at other times. Two enemas daily were continued, in order to ensure a free cleansing of the bowels. This is called the "Salisbury regime," and is especially effective in the treatment of all forms of rheumatism.

The patient continued this regime for two months, and was then put upon a general diet which she has continued to the present time. It is over two years since the fast was completed, and the patient has never had a sign of the return of any rheumatic pain. Of course most of the joints which were affected are quite stiff, and will never entirely resume their former flexibility, but the patient feels quite well in every way and is able to do her own housework.

The belief held by most physicians that meat eating is the principal cause of rheumatism is an assumption that is not founded upon fact. The lowered alkalinity of the blood, as found in rheumatic arthritis, is caused mainly by the fermentation of carbohydrate foods used in excess or in improper combinations. Meat cannot ferment, no matter in what quantities it is used, and if used in proper combination with other foods, will never be any factor in the production of the toxemia responsible for rheumatism.

CASE 67. Man, 38 years of age. Had been troubled with lumbago for several years, and for two years before presenting himself to me for diagnosis had suffered from pains in his left leg, which had been pronounced rheumatism. In the examination with the X-ray, I discovered that the large intestine at the rectum was greatly distended by an accumulation of feces, and after careful analysis of his case, I told him I believed this particular local pressure of feces in the rectum was the cause of both his lumbago and sciatica. He was accordingly advised to take an enema as soon as he returned home, and again before going to bed that night, and an orange juice fast was prescribed for him.

When he returned to my office the next day, he said that he awakened that morning for the first time in years without a sign of the lumbago or pain in his leg, and that he had walked for several blocks without having found it necessary to limp, a thing he had been doing for two years in an attempt to avoid the pain felt when stepping in the ordinary way. This proved conclusively that my diagnosis was correct. However, the patient continued to fast for several days, meanwhile using three enemas daily, and was then placed upon a diet similar to that given in the treatment of constipation. (See article on Constipation.)

Local treatments were given to the rectum by electrotherapy in order to produce a healthier tone of the rectal muscles, and he continued to take one enema daily for several weeks. As the constipation was gradually overcome, the electrical treatments and enemas were discontinued, and he has not had a return of either lumbago or sciatica for over three years.

CHRONIC TONSILLITIS

This disease is present at any age, but is most noticeable in children, as the tonsils are normally larger in childhood, and slowly reduce in size through the years, so that at maturity the healthy tonsils can hardly be seen in the throat. If enlargement exists, in childhood, in addition to the usually large tonsils, the throat will be partially closed, and often the tongue will protrude in an effort to get enough air into the lungs through the esophagus.

Adenoids are usually present with inflammation of the tonsils, and sometimes the eustachian tube and middle ear are closed, producing partial or complete deafness. The cause of these conditions is entirely dietetic, and may be removed through a strict dietary regimen. The general health is greatly impaired and often even mental derangement exists, but these conditions are quickly removed as soon as the causes of the diseased tonsils are removed.

The tonsils may be the seat of very serious infection, producing diseases similar to those caused by abscessed teeth. When the nerve of a tooth is removed, unless the canal is cleaned thoroughly and filled to the end of the root, an abscess will form when enervation exists, producing a toxic poisoning which will cause other diseases. Because of the necrosis of bone, the tooth must usually

be removed. This is not true with a diseased tonsil, as it may be locally and permanently cured by the addition of constitutional treatment which will remove the toxemia which is really responsible for the enlarged or pussy glands. If the tonsils are filled with pus, there will be an immediate benefit to the system when the receptacles of poison are removed. But the cure is quite simple and satisfactory in every way if the cause of the disease in the tonsil is removed by systemic treatment, as these glands will then return to their normal size and be clean and healthy. An excess of starchy and sugar food is directly responsible for this disease, and the products in the blood from the fermentation of these foods must be removed as quickly as possible.

This is accomplished rapidly by complete abstinence from all food except fruit juice and water until the glands have reduced materially in size. The colon should be cleansed by enemas, and at least two sponge or shower baths taken daily. After several days of this regimen, the patient will be able to breathe freely with mouth closed, and the tongue will return to its normal position. This may seem too good to be true, but I assure you the following cases, far from being exceptions, are only typical of thousands of others that have been under my advice and observation.

It is often advisable to treat the tonsils locally with the ultra-violet ray, especially in cases of patients past maturity, where the crypts are greatly enlarged and the glands are ragged from long continued disease. You may expect remarkable results through a five-day fast, but a more complete change if it is continued for about ten days. The diet following the fast must be free from carbohydrates for some time, and an increased amount of leafy green vegetables must be used.

The adenoids will be reduced almost as rapidly as the tonsils with the same treatment, as the cause and cure are the same. If you or your child should happen to be suffering from any form of tonsil disease, try the treatment as outlined in the following cases, and watch the miracle work.

CASE 68. Child, 2 years of age. A few weeks after birth the parents observed that the baby's mouth appeared to be held open, with the tongue protruding most of the time. Breathing was difficult, and the baby did not sleep well. This trouble gradually increased, so that presently the child did not sleep for an hour at any time either during the day or night, because of the difficulty in breathing.

Upon examination by a throat specialist, it was found that the child's tonsils were enlarged to such an extent as almost entirely to shut off the air from entering the lungs. The nose was also filled with adenoid growths. The throat specialist advised an immediate operation, but before consenting to this the parents brought the baby to me for examination.

Before the child was brought into my examining room I could hear it gasping for breath while waiting in my reception room, and from the sound made I supposed that an asthmatic patient was being brought to me. Apart from the contortions of his face, made in his struggles to breathe, the baby seemed healthy enough. The tongue was protruding at least an inch. No air was being taken through the nose, as this was almost entirely stopped. I made only a brief examination and prescribed the following fast:—

Juice of 1 orange taken every three hours with half a glass of water.

Three enemas daily, each of a pint of warm water.

Two warm sponge baths daily.

The examination was made about 1 o'clock in the afternoon, and the fast was started immediately. The change in the child's condition was so great during the remainder of the first day that he was able to sleep for ten hours straight through that night. The tongue gradually drew back in the mouth during the next few days, and the tonsils were reduced in size, until at the end of 7 days they seemed to be perfectly normal. From the very first night until the present time, the child has slept clear through the night. After the fast the following diet was prescribed:—

- Breakfast and lunch—The whites of 2 eggs cooked by heating them up with 2 tablespoonfuls of water in a dry pan over a slow fire.
2 Pieces of thin, brown toast, moistened with hot water and seasoned with butter.
Small dish of stewed raisins.
Dinner— Small piece of broiled steak.
Either cooked spinach or asparagus, and raw celery.
4 Stewed prunes.

This diet was continued for several weeks. The baby lost a little weight at first, because he was already overweight from the excess of starchy foods he had been using. Since then he has had other articles of food added to the diet, and is now living upon diets suitable for children, as explained in Chapter XV, Part II. At the present time the nose is entirely clear of any adenoid growths, the tonsils are normal in size, there is no protrusion of the tongue, and breathing is entirely through the nose at night.

TUBERCULOSIS OF THE LUNGS

The immediate cause of tuberculosis of the lungs is the accumulation of foreign matter in the lungs of the sufferer. This condition is only possible after the patient has become enervated through wrong habits of life.

The typical case develops in the person with a chest expansion below normal and who has not taken sufficient exercise and deep breathing to overcome this defect. Add to this condition improper dietary habits, then enervation from over-work or a waste of nerve force from destructive habits of thought, and you have a proper clinical picture of a person who is ready for tuberculosis. A slight cold is often enough to start the disease unless the conditions are such that the body has sufficient energy to eliminate the resultant toxins. The patient will then have a succession of symptoms such as hoarseness, expectoration of mucus, afternoon temperature, and night sweats. There is no disease where greater care is necessary to bring about a cure and where medicinal preparations are absolutely of no avail.

The first essential step is to eliminate all the toxic material from the body and especially from the lungs. This is accomplished with the greatest rapidity through the fruit fast, followed by a diet rich in proteids and non-starchy vegetables. Those foods such as carbohydrates and fats whose composition provide the materials for the formation of mucus, should not be used until the system has had an opportunity of expelling the accumulated phlegm which has already formed in the lungs. As the lungs become gradually freed from the encumbrance of foreign material, the patient is advised to take an increased amount of light exercise and deep breathing. Wrong habits of thought must be corrected and changed into thoughts of happiness, health, and courage. Every effort used to turn destructive thoughts into constructive ones will be rewarded by an increase of energy, and will be the means of bringing the patient step by step closer to perfect health.

Every avenue for the waste of nerve energy must be closed and the patient must practice unceasingly va-

rious means for developing increased strength. A certain amount of rest, especially during the afternoon, is essential at the beginning of the cure, but I do not advocate the practice of confining a patient to bed constantly except in the most severe crisis when the temperature is high. Sleeping quarters should be where the air is fresh, but not so cold as to be irritating to the delicate lung tissue, as the virtue of fresh air lies in the fact of its abundance of oxygen and not in its temperature. The patient must not be discouraged in the loss of weight necessary at the beginning of the treatment, as vigorous elimination of toxins is essential at the start, and no weight will be lost which will be of any benefit to the patient to retain. Increase of weight will only come when the disease is overcome and the building up process begins.

CASE 69. Young man, 36 years of age. Developed tuberculosis about two years before coming to me for treatment. His home was in Chicago, and he came to Los Angeles against the advice of physicians who thought he could not live through such a long trip. An X-ray examination of the lungs showed one lung to be entirely filled with pus, and the other about half full. I do not recall having seen a worse case of tuberculosis where the patient was able to come to my office for examination. He was coughing up quantities of pus, and the odor from the breath was so offensive that he had to be taken through a back door into a special treating room, because the other patients could not stand the smell.

An orange juice fast was taken, using half a glass of orange juice every two hours during the day, together with a glass of water. During the first week of the fast, he coughed up about three times as much mucus and pus as he had been doing. The fast was continued for twelve days in all. When the quantity of pus eliminated began

to diminish, re-examination with the X-ray showed the lung which had been completely filled with pus cleared of about half of the accumulation. The temperature had been as high as 104 degrees at 2 o'clock in the afternoon on the day of examination, but this was reduced at the end of the fast to less than 100 degrees. The patient was then put on the following diet:—

Half a pound of Salisbury steak four times daily, together with as much of either celery or tomatoes as might be desired. A pint of hot water was taken half an hour before each of these meals, and another half pint of hot water was taken at the time the meal was eaten. This is the so-called Salisbury regime.

The patient was advised to take one enema daily, and three times daily a treatment was administered over the chest and back with a 6,500 candle-power therapeutic lamp. This lamp was devised by me, and is made with a highly polished aluminum shade, inside of which is an argon-gas-filled lamp containing a tungsten filament. This radiates 6,500 candle-power of light as it strikes the skin, and the light and heat from this lamp are driven into the body, improving the capillary circulation and increasing metabolism. One of these treatment lights was installed in his home, and after each treatment a sponge bath was given him, cold water being used, to each quart of which a tablespoonful of epsom salts was added.

This diet and treatment regime were continued for three months, during which time the patient gradually improved in every way. The lungs became clearer and strength increased with each day. At the end of three months the following diet was recommended:—

Breakfast—2 Coddled eggs.

3 or 4 slices of brown toast.

Dish of stewed fruit selected from the following: Prunes, raisins, apricots, figs, baked apple or apple sauce.

- Lunch— A choice of the following raw salad vegetables: Lettuce, spinach, celery, parsley, small green string beans, carrots, turnips, parsnips and beets.
- Dinner— Either Salisbury steak, roast beef, or broiled steak.
2 Non-starchy vegetables.
Choice of any of the salad vegetables.
Stewed fruit every other day, and jello on the alternate days.

At the end of two months of this diet, the patient was so much improved in health that he decided to take a trip to Chicago to look after business interests. He has never returned to California, but has continued on his diet, and I received a letter from him recently in which he said he had been re-examined by a Chicago physician and pronounced perfectly well. He has since that time sent a number of patients to me from Chicago, suffering from tuberculosis, and in several cases has paid their expenses for treatment.

CASE 70. Young man, 30 years of age. Started coughing 4 years previous to the time he came to me as a patient. About six months after starting coughing he had a hemorrhage of the lungs. These hemorrhages were repeated quite frequently, and he became greatly enervated. Had been unable to do any kind of work for over three years. Blood pressure was low, being only 112 millimeters systolic, and the pulse was unusually high due to the lung congestion and coughing. X-ray examination of the lungs showed a general mottling of both lungs, but neither lung had any large cavity of pus.

A fast was advised, using the juice of one grapefruit with one glass of water every two hours. This was continued for 17 days, when the following diet was advised:—

- Breakfast—1 Coddled egg.
 2 Pieces of thin, brown toast.
 Choice of one stewed fruit.
- Lunch— Choice of one of the following raw fruits:
 Apples, pears, figs, grapes, or tomatoes,
 together with one glass of water.
- Dinner— Choice of one of the following: Lean beef,
 mutton, chicken, turkey, Belgian hare, fish
 (except salmon).
 Choice of one of the following cooked non-
 starchy vegetables:

Summer squash	Parsley
Swiss chard	Celery
Spinach	Small green string beans
Asparagus	Egg plant
Beet tops	Kale
Turnip tops	Mustard greens
Lettuce	Cucumbers
Chayotes	Artichokes

Choice of one of the following salad vegetables:

Watercress	Celery
Asparagus	Lettuce
Parsley	Endive
Cucumbers	Tomatoes

One enema was advised daily, and cold or warm sponge bath. Was advised to put a hot water bottle at the foot of the bed before retiring. This was continued for 12 days, and then the following diet was advised:—

- Breakfast—2 Coddled eggs.
 3 or 4 pieces of hard, thin, brown toast.
 Butter as desired on the toast and to season the eggs.
 Choice of one of the following cooked dry fruits: Prunes, pears, apricots, figs, raisins, apple sauce, baked apple, ripe figs with cream. All fruits prepared and served without sugar.

Lunch— Celery or asparagus soup.
 Choice of one of the following medium starchy vegetables: Carrots, parsnips, turnips, beets.
 Choice of one of the following cooked non-starchy vegetables:

Summer squash	Small green string beans
Spinach	Asparagus
Egg plant	Oyster plant
Beet tops	Kale
Turnip tops	Mustard greens
Celery	Lettuce
Cucumber	Chayotes
Artichoke	Parsley
Swiss chard	

Choice of one of the following raw salad vegetables: Watercress, asparagus, cucumber, endive, celery, parsley, lettuce.

Dinner— Choice of one of the following: Lean beef, mutton, chicken, turkey, Belgian hare, fish (except salmon).
 Choice of two of the non-starchy vegetables served at lunch.
 Choice of one or all of the raw salad vegetables served at lunch, with the addition of tomatoes.
 Choice of one of the stewed fruits served at breakfast.

One enema daily was taken in the knee-chest position, also 2 sponge or shower baths daily, either warm or cold. A hot water bottle was placed at the foot of the bed before retiring each night.

At the start of the treatment the patient's weight was 144 lbs., and this was gradually reduced to 125 lbs. The patient had no hemorrhages at any time after starting my treatment, and the coughing gradually diminished until at the end of about five months it had entirely disappeared. Blood pressure became normal, and he assured

me that he never had felt as strong before in his life. He returned to his work in the shop, and is still in perfect health after several months. His weight is still 125 lbs., and this seems to me to be about the normal for him. It is to be noted that at the start of treatment his weight was 144 lbs. This was because he had been stuffed into increasing weight by other physicians who had advised that dietetic procedure. The stuffing process is one that I always disapprove of in the treatment of tuberculosis, as I find that the patient must as a rule lose weight before a cure can be expected.

VARICOSE VEINS

These enlarged veins may occur in any part of the body, but are usually found in the legs, where the circulation is more sluggish than in the upper part of the body. The walls of the veins become relaxed, and the veins themselves will often protrude, or will press inwardly upon the nerves of the leg sufficiently to cause quite painful symptoms. If the disease is long continued, ulcers will often form over these enlargements of the veins, and these ulcers will exude a large amount of serum and finally of blood.

Varicose veins are generally treated by surgery, when a certain section of the vein is bodily removed, or the patient is advised to wear a rubber stocking. This latter, however, only adds to the weakness of the veins, and additional trouble may be expected if the stocking is removed.

The permanent cure of either varicose veins or the varicose ulcers depends upon a general vitality-building regime suited to the needs of the patient, and a suitable fast is usually recommended at the start of the treatment in order to get the blood in a healthier condition so

as to be able to build stronger walls in the veins. Local treatments are absolutely indispensable if you wish to shrink the enlarged veins to normal size. These local treatments may be administered with certain kinds of electrical apparatus, but these can only be given in a physician's office.

Local treatment of a beneficial kind, however, may be used by the application several times a day of a piece of ice to the enlarged vein. The ice should be held against the vein with a towel in the hand, so that the hand will not become too cold, and a smooth part of the ice pressed directly against the swollen part. This treatment should be continued from three to four minutes, during which time the muscles in the walls of the vein will become strengthened by the contraction produced by the ice. Apply the ice successively to the different parts to be treated, and treat at least twice daily, and as often as possible in addition.

A partial substitute for the ice treatment can be had during cold weather by sitting on the side of a bath tub and allowing cold water to run over the part of the leg where the varicose veins are located. The ice treatment is, however, the best local treatment that can possibly be devised. Bear in mind the benefit to the whole circulatory system to be derived from living on a carefully selected diet.

If varicose ulcers exist they will disappear very rapidly during the fast especially if local treatments are also administered to the ulcers by radiations from the ultra-violet light.

CASE 71. Woman, 73 years of age. Upon examination I found she had large varicose veins in the lower part of both legs, and several varicose ulcers. The patient was brought to my office for diagnosis, but the pain

was so great in both legs and in the lower back that she had difficulty in reaching my rooms.

I immediately applied a strong treatment with the ultra-violet ray, treating each ulcer for twenty seconds. This ultra-violet light, it should be explained, is not the violet ray produced by high frequency apparatus, but is an actinic or chemical ray developed in a certain kind of lamp from the radiations given off from a mercury quartz generator. Do not confuse one with the other, as the violet light from a high frequency apparatus has an entirely different therapeutic value. The patient was advised to take a plain water fast for four days, using two enemas daily. After this she was put on a general diet, and advised to return to the office for further treatment at the end of ten days, that interval being necessary before the ulcers, which were sloughing off from the effect of the rays, could be further treated.

When she returned to my office for further examination, I found that the ulcers were entirely healed, having been completely cured by the diet regime and the one treatment with the ultra-violet light. All pain in the legs and the lower back had entirely disappeared, but there was still some enlargement of the veins in the legs. Accordingly she was sent home with instructions to apply the treatment with ice as outlined in the foregoing description of the general treatment.

After another month she returned once again, and an examination disclosed no signs of varicose veins further than the slight enlargements to be found on the legs of most people who have worn tight garters. I advised her to apply the ice occasionally as a preventative treatment, and to remain on her well-balanced diet. That was three years ago, and the patient has had no return of either the varicose veins or the ulcers.

PART II

CHAPTER I

EVOLUTION OF DIET

Without a doubt the smallest form of life, either in the animal or plant kingdoms, has as its strongest instinct the desire for self-preservation. There is inherent intelligence in all life, which is constantly urging that life to fight in order to exist as long as possible, and to preserve itself against all danger. We have every evidence that primitive man, in his struggle with nature for existence, had a difficult time in supplying himself with food enough to meet the demands of the physical organism. At the present day this problem of food supply has been solved for civilized man, so much so that the tendency now is to go to the other extreme and prepare an infinite variety of food with which to please his taste or appeal to his appetite, with a consequent danger of over-eating and loss of real hunger altogether.

After much study of the history of the evolution of man's diet, and from the experience and observation gained through years of prescribing dietetic treatment, I am convinced that there is no single class of food which can be said to be the "natural" food for man. Every kind of food which has been used by the different creatures that have lived upon this earth, has been at some time or other used as a food by man. At the present day some primitive tribes are to be found living exclusively on fruits, and others, in practically the same stage of development in another country, living almost entirely upon flesh foods. We know, for example, that the Eskimo subsists upon meat alone, using both the muscular

and fatty parts, and being thus limited in his selection, probably lives on a more carnivorous diet than any other race in existence at the present time. The Chinese, on the other hand, use an overabundance of rice in their diet, while the Hindus combine their rice and other grains indiscriminately with fruit.

It is claimed that practically two-thirds of the world's population live on a vegetarian diet, but it will be noted that the largest proportion of this two-thirds is made up of Chinese and native Hindus. The dominant nations of today are made up of people who live on a mixed diet, and in many respects might even be called heavy meat eaters. It is worthy of note, in this connection, that a comparatively small number of meat-eating Englishmen are able to control millions of native Hindus, also that, with few exceptions, the men who have accomplished the greatest results either in commerce or invention have been those who lived on a mixed diet, where a considerable quantity of flesh food was used.

There is no doubt that a strict vegetarian diet, if followed scientifically and carefully, will produce a certain calmness and poise which is not so noticeable in the meat eater, who however is more aggressive and often more nervous than the vegetarian. Impartial observers find it hard indeed to make a comparative study of true types of vegetarians and meat eaters, as there is so much hypocrisy among food faddists generally that they will nearly always be found to make exaggerated claims in an endeavor to bolster up their particular contention that one class of food is more important than another. My personal experience, however, obtained in different parts of the United States among a host of friends, including Theosophists, Seventh-day Adventists, Buddhists, Raw-fooders, Physical Culturists, Fruitarians, and many

others, who claimed to live without animal products, has been that not one of these people actually lived for any length of time strictly according to this rule. At the same time I firmly believe that it is quite possible to be well nourished on a strictly vegetarian diet, if the selection of foods is made carefully and with an adequate knowledge of the proper proportion and combination of the different elements necessary. If one has an ethical or religious objection to the use of flesh foods, it is really the height of folly to suppose that good results can be obtained by living on a haphazard diet with no more specific object in mind than the exclusion of meat.

The different foods employed by civilized man at the present day have been adopted for nourishment after centuries of experience and habit, and anyone who has been raised in a civilized country on a mixture of foods, and who may desire for ethical reasons to live upon a flesh-free diet, must take the utmost care in making the change so that the body will not suddenly be deprived of elements to which it has long been accustomed, without suitable substitution being made at the same time of some other food which will supply these elements in another form.

It is not enough that the proper elements alone should be known and used in the diet, but it is equally important that the different food substances should be combined with each other in such a way as to make harmonious mixtures. One of the greatest mistakes that can be made by anyone who is attempting to diet is to try to supply all of the different elements at the same meal. This is neither necessary nor advisable, as some foods will not digest well with other foods, even though both may be necessary for the body, but will set up fermentation and digestive disorders, whereas if each were

used at a different time with some other article of food, such a "food battle" would be avoided.

It is advisable to use at some time or other during the day all of the elements which the body requires, but it is most assuredly not possible to do this at each meal without producing inharmonious combinations which will cause fermentation and lead to autotoxemia, even though the best foods are used. There will frequently be such an improper combination of food elements in one article of food alone, that excess fermentation will be produced without using any other food at all. You are all no doubt familiar with the fermentative activity produced by that dynamic spheroid the navy bean, which is so disturbingly combustible in the human digestive apparatus. Most of you also are familiar with the composition of water. You know that it is made up of 2 parts of hydrogen and 1 part of oxygen gas. Oxygen gas by itself is highly explosive, and was used during the war in certain kinds of explosive shells. Oxygen is necessary to support combustion, so that nothing can burn unless oxygen gas is present. However when twice as much hydrogen gas is added to oxygen gas it produces a liquid which we call water, and which will extinguish fire altogether.

You are furthermore certain to be familiar with the fact that prescriptions of medicine must be compounded with exactness, and that the slightest deviation in the nature of adding some incompatible substance might result in the most serious consequences. This is none the less true when the study of food substances is considered from the standpoint of physiological chemistry. It is therefore of the utmost importance that we should learn how to proportion and combine our foods properly, and how to practise the use of good combinations so faithfully that we make proper eating a fixed habit. If you

do this you will find that these good habits are not easily broken, and that they will make you healthy and keep you so. Of course long and well established customs are not easily broken, but if you are sincerely anxious to develop your life to the fullest point of efficiency, you will learn to be master of good eating habits, and not be yourself mastered by bad ones.

The habit of eating larger quantities of food than the body requires is a bad habit, which cannot be too strongly condemned. If food is used in excess above the body's requirements it is bound to produce a clogging up of the vital processes, for if it is not needed it is invariably harmful, and always productive of causes which lead to disease. As the fire in a furnace is easily smothered and extinguished by an excess of fuel, in the same way the natural health of the body is destroyed by excess and intemperance in diet. There is not the slightest reason why the natural appetite for food should not be enjoyed to a certain reasonable extent, but when one has got so far as to look upon the kitchen as a shrine, the chef as a savior, the table as an altar, and the stomach something to be worshiped as a god, it will be found that there is little time left to do anything really worth while in the world, and suffering from the diseases such gluttony invariably produces will be sure to follow.

The fashionable table, set out in all its magnificence, is no doubt a beautiful and tempting shrine at which to worship, but behind the dishes I often fancy I see the demons of rheumatism, gout, fever, pain, headache, and innumerable other disorders lying in ambush. It will nearly always be found that the partakers of these bountiful feasts are sufferers from various diseases, and that the root cause of each and every one of these diseases is very much the same, namely inharmonious conglomer-

ations and mixtures of food, and the eating of excessive amounts, rather than any specific article of food in itself.

The body overburdened with unnecessary tissue is the most subject to so-called "infectious diseases" as hungry bacteria are constantly looking for a good feeding ground. Those houses in which the most provisions are stored are likely to be full of mice, and in precisely the same way the bodies of those who eat too much or indiscriminately are full of disease germs, and are really providing the most perfect kind of hunting ground for millions of bacteria in search of a suitable place to feast.

In the following chapters I propose to discuss the different classifications of foods and their use in the body, in the particular way which I think will be of most benefit to the reader. I have studied every form of diet cure and philosophy, from the apple diet as first advocated in the Garden of Eden, to the present-day vitamine idea, and have devoted a large part of my life to this work. As I present to you the various phases of dietetics you will no doubt be impressed with the apparent simplicity of the instructions. However, if the simplicity of the instructions should alarm you in any way, rest assured that, although put before you in plain, matter-of-fact terms, they really represent the gleanings from much valuable knowledge, with all of the chaff removed.

It will be observed that I do not make specific reference to other authors in this work, and that certain methods of classifying food commonly used by other writers I do not even mention. The explanation is that in all of my writings and lectures on the subject of food I have always attempted to put forward the simple truths and facts as I have proven them in my own experience, and have never thought it wise to burden the student with

masses of what is often worthless rubbish taken from other books. If any of my readers are actually looking for incomprehensible books on dietetics I can refer them to thousands that have been written, but they may rest assured that my findings and rulings, however plainly set forth, represent the result not only of wide personal experience but also of extensive study and research among the works of the best authorities.

It is well enough known that no truth, simple though it may be, can really be considered as a truth by any given individual until such individual has actually lived and experienced it, and although you may consider that you are thoroughly familiar with many of the ideas in the following chapters, do not make the mistake of believing you really understand them until you have practised them faithfully.

CHAPTER II

PROTEID FOOD

This element of food material is the most important substance used in the building of the body. It would be absolutely impossible for human life to exist if denied this indispensable material. Most of the tissue and bone structures are made from proteid, and could not be built up or repaired by any other element. Just as steel is the material out of which a gasoline engine is made, so proteid food bears the same relation to the human body. Carrying the simile a little further, the carbohydrate foods, i. e., sugars and starches, which are used so much in the every-day diet, furnish gasoline or energy to run the human engine. But if all the pure starches and sugars in the world were eaten at one time, they could not furnish material for the building of a single useful cell of the body, any more than gasoline could be made into an engine.

If more proteid is used than is necessary, on the other hand, for building and repairing the body, this extra proteid can be converted into energy. The best evidence of this is seen in the case of the carnivorous animals, and those human tribes where meat is absolutely the only article of food. I wish to bring out this point clearly, as there is much erroneous teaching upon the subject, principally by those who are anxious to condemn meat as a food. Many vegetable foods and cereals contain a large percentage of proteid, which is taken up by the body in the same way as the proteid in meat, but often the combination with the starches in the same food is of such a proportion that excess fermentation takes

place, and sufficient toxemia is produced to more than offset the value of the vegetable proteid.

Most animal proteids are more readily assimilated and converted into tissue than vegetable or cereal proteids. Those persons of a strong digestive type, with wide, powerful jaws, which I often call the "ox" type, may be able to handle these non-meat proteids more readily, but at the same time such people will usually be found to be slower both mentally and physically than the other type, in the same way as the ox is slow compared with the fox. The more intellectual type, with a narrower jaw and possibly less digestive power, will flourish best on animal proteids, with less expenditure of energy in digestion. I always want to call this class the "fox" or "wolf" type, because of this ability to get so much more good from meat foods than from starchy vegetables.

The latter class make up the largest proportion of patients with digestive troubles, and I am convinced it is often because they use too many vegetable foods of a high carbohydrate percentage, instead of the right amount of animal proteids properly combined with the succulent, non-starchy vegetables. Those who have succeeded either in athletics or in the world of commerce or letters who happen to be vegetarians, have always been of the heavy-jawed, digestive type. The writer of this book, being of the strong digestive type, and also ethically opposed to flesh eating, was slow in coming to this conclusion, having spent his early life as a vegetarian, and at the same time having been more than ordinarily successful in various forms of athletics, such as football, basketball, boxing, wrestling, etc. It took many experiments upon athletes and patients before the light of knowledge was able to dispel completely his strong

desire to believe in vegetarianism as an all-sufficient philosophy of life.

I find that the bugaboo of the meat evil is not so much a vicious, devouring monster, but in reality one that can be harnessed and controlled as a really vital and powerful instrument to further the development of a more efficient life. This belief is strengthened day by day as I find my patients benefiting by the application of facts to their cases, and not fancies.

If carbohydrates are used to a large extent, it becomes necessary to take only such proteid food as will be necessary to repair the tissues, since the energy for the body may be derived from the carbohydrates themselves. It will take a careful study on the part of the student to learn to regulate the right proportion of proteid in the diet, as no hard and fast rules can be laid down regarding the exact amount necessary for any one person, but such must be formulated only upon the results achieved. One occupied in mental work without hard physical exercise, will be able to use a larger amount of proteid than one whose daily labor is mainly with the muscles, and this latter in turn should use more carbohydrates to supply the muscular energy necessary for his work.

If the brain worker will take the proper amount of physical culture exercise of a strenuous nature, the diet will not require to be so carefully balanced, as the increased exercise will take care of the additional carbohydrates.

The following tables have been arranged in a manner that will possibly be more easily understood than others you have been accustomed to, yet I believe their simplicity will really help you to a fuller understanding of the value of the different proteids.

GOOD	NOT SO GOOD	NOT GOOD
Lean Beef	Dried Beef	Heart
Mutton	Pork	Kidney
Chicken	Fresh Tongue	Liver
Rabbit	Veal	Lungs
Turkey	Lamb	Smoked Tongue
Sole	Wild Fowl	Spiced Meats
Halibut	Wild Game	Sausage
Seabass	Salt Cod Fish	Hot Dog
Pickarel	Salmon	Bologna
Fresh Cod	Lobster	Brains
Tom Cod	Clams	Corned Beef
Perch	Shrimps	Pickled Tongue
Black Bass	Oysters	Sweetbreads
Tuna	Crayfish	Pickled Feet
Eggs	Nuts	Limburger Cheese
Cottage Cheese	Roquefort Cheese	Canned Fish
Cream Cheese	Cat Fish	Smoked Fish
Gelatin	Mackerel	Salt Mackerel
Frogs' Legs	Crab	Hamburger Steak
Turtle	Domestic Duck	
	Domestic Goose	
GOOD		

Beef. Lean beef meat is probably the best proteid food for all purposes, and if not used in excess is the most valuable food we have in our dietary. The average adult person can safely use an average of about half a pound of lean beef daily, and in such cases as there is a large amount of brain work done, with a consequent excessive expenditure of nerve force, even more than this quantity can be taken without harm.

The simplest and best way to prepare beef in the home is to broil beefsteak. Any kind of cut of beefsteak may be used, but because of the added pleasure from eating tender meat it is preferable to use sirloin steak for broiling. If the fat is entirely removed the meat will be rendered more easily digestible, because the fat, spluttering upon the lean part of the meat during broiling, will toughen it against the digestive juices, in much the

same way as if it were in the pan. This steak may be done quite rare, or may be well done, depending upon the desire of the patient, as the digestive juices will flow most strongly when meat is prepared in such a way as to please the appetite.

Another good way of preparing beef meat is to cook what is called "Salisbury Steak." This steak is made by grinding through a meat grinder only the red, lean part of round steak, from which all gristle and fat have been removed. This may seem similar to Hamburger steak, but is really more palatable and more easily digested, and has in addition an entirely different flavor than when the fat is left in. There is usually about a quarter of a pound of waste to each half-pound of lean meat, so that it is advisable to purchase three-quarters of a pound of steak for each person to be served.

After the meat has been put through the grinder, this finely ground meat is pressed flat into some kind of a pan like a cake tin. No grease should be added or rubbed on the pan, but the pan should be entirely dry. The ground meat in the pan may be up to one inch in thickness, and it should be placed in a hot oven and the fire then turned down. The meat will cook through quite well in about five minutes, and will be cooked sufficiently in two or three minutes if rare meat is desired.

After cooking it may be cut into small pieces for serving, or cooked in different patty shapes similar to the manner in which Hamburger steak is often prepared. A tasty addition may be made by grinding spinach or parsley up with the meat, and when this is included it will impart a slightly different flavor. This method of preparation is an excellent one to employ in connection with the use of round steak, which is probably the most wholesome cut of beef meat it is possible to obtain, and which

has also the added advantage of being the cheapest in price.

Round steak may also be broiled under the broiler or pan broiled, if it is properly hammered before cooking, so that the connective tissue is well broken down. When pan broiling, it is advisable to remove all fat from the meat, and then heat an iron frying pan until it is quite hot. Drop the sirloin steak or pounded round steak in the pan without any grease, and the instant it strikes the pan, turn it over with the fork which has been held in the hand ready for that purpose. Continue to turn the meat back and forth, leaving it only a few seconds on each side, so that both sides will be seared equally, and the juices will be retained in the meat. Of course some of the steak will always stick to the pan, but this burning of such meat as may adhere really imparts a distinctly agreeable flavor to the meat which is cooking.

Those who are fond of roast beef will find more satisfaction in beef which is roasted in restaurants, as beef cannot be roasted satisfactorily except in large quantities.

Mutton. You will find some difficulty in being able to obtain a leg of mutton in the butcher's shop, as the butchers at the present time seem intent upon selling only lamb, and will give you this immature lamb meat when you ask for mutton. It is always advisable to pick out the largest leg of mutton you can find, as this will usually indicate that the animal was more mature when butchered, and consequently that the meat will be more easily digested, immature meat being always more difficult of digestion.

Mutton chops may be broiled under the broiler, or pan broiled as in the case of beef steak, but there is no doubt that the most desirable way in which to prepare

mutton is to use it in the form of a leg of mutton, as this is about the right size to fit in an ordinary oven. Roast with a slow fire, so that the meat will be thoroughly cooked all the way through, and on no account flavor the meat at any time with onions, garlic, salt, or any other seasoning.

Chicken and Turkey. Young chickens are best prepared by broiling, but the meat of a mature chicken has undoubtedly more real food value, and is best prepared by roasting. If the chicken is too old or tough, boiling is often the only way it can be satisfactorily prepared, but often parboiling the chicken for a time will break down the toughness enough to permit the cooking to be finished by baking in the oven. In roasting or baking in the oven, the juices of the meat are retained more than in any form of preparation by boiling, and this seems to impart a more desirable flavor.

The most injurious food at a chicken dinner is usually the stuffing which is cooked inside of the chicken, made out of sticky white bread, and overseasoned with sage and onions. A fine stuffing, however, may be made out of the following mixture: Grind through a food grinder a suitable number of dried, whole-wheat muffins, which have been made from whole-wheat flour. This may then be moistened with a small amount of milk, and any desired quantity of the following added: Ground celery, raisins, and minced olives. Mix these together in any proportion desired, being cautious not to use too many raisins. The mixture must not be made too moist or too dry, and experience only will teach you the exact proportion of foods needed to impart the flavor which you will most enjoy. Serve a small portion of this with each serving of chicken, and any person in good health will enjoy it, and not be distressed as is usual after eating the

sticky dressing commonly used. Ground Melba toast may be substituted for the ground whole-wheat muffins, and a dressing made with this will be relished by some people even more.

Turkey. Turkey is roasted in the same way as chicken, and the same dressing may be used.

Belgian Hare. This particular kind of rabbit is raised in certain parts of the country in large numbers for different purposes, and I am specially mentioning Belgian Hare because of the fact that the meat from this is the healthiest and the most easily digested. The weight of a Belgian Hare, as they can be purchased in the market, is between 1½ and 2½ lbs., and in this size may be easily broiled, and can even be satisfactorily pan broiled without grease. Two or three may be put in a roasting pan in the oven and roasted through in a few minutes.

If it is possible to secure a rabbit weighing 4 to 5 lbs. when dressed, you will find that a most satisfactory roast may be made of it, stuffing it with the same dressing as explained in the article on chicken and turkey. This older rabbit has a distinctly different flavor, and is more desired than the younger variety by those who have ever eaten it, but as the market calls for smaller rabbits, you will possibly have difficulty in finding one of this large size. However, you can often secure it by ordering from the butcher in advance. In case your local dealer is puzzled by the name "Belgian Hare," it may be explained that only such rabbits as are raised for eating purposes and whose meat is light after cooking, are recommended for use.

Fish. In the "good" class you will find such fish as sole, halibut, sea bass, pickerel, fresh cod, tom cod, perch, and black bass listed because they are more easily di-

gested than other fish. This is mostly due to the fact that they do not contain as much fat in proportion to their proteid as many of the other fish, for it seems that the proteid of fish is not easily digested if cooked with its own fat, or any other of the fats used in frying. A majority of people will enjoy the flavor of fish which has been broiled, more than when it is prepared in any other way.

Great care must be used in combining fish properly with other foods, as it is never as easy to digest as beef, mutton, chicken, rabbit, or turkey. If you find that you digest fish imperfectly, even when used in proper combinations with other food, it will be wise for you to discontinue its use until a later time when digestion has been strengthened. Tuna fish can be obtained in cans, and may be used for a change where no other proteid is available, but must be eaten soon after the can is opened, as it seems to decompose very freely after being exposed to the air.

Eggs. Eggs are undoubtedly one of the most valuable forms of food from which proteid or muscle-building material can be obtained, and they can be taken in such a variety of ways that even those who are attempting to use a vegetarian diet usually add eggs, and in this way are able to keep up the proteid intake sufficiently to remain well. Eggs are more easily digested when cooked slightly soft, and are harder to digest when used in their raw state or cooked hard enough to become leathery. The poorest way to prepare eggs is by frying, as cooking in this manner renders them more indigestible.

Most people will find that they are able to use somewhere between one and two eggs daily, and the best average for the week is probably ten or twelve eggs. A very large amount of white of egg may be used if the yolk is eliminated, as this yellow part of the egg contains a

large amount of sulphur and fat, which will cause digestive disturbances if used in excess.

Coddled Eggs. Place the unbroken eggs in a deep pan which is not standing on the fire, and pour over them boiling hot water. At least one quart of hot water should be used to each two eggs. Allow to stand from 5 to 10 minutes. When broken open the egg should have a jelly-like consistency, but should at the same time be so well cooked that there is no transparent albumen which has not been coagulated. If the dish is covered, less time will be required to get the same effect, but it is possibly more desirable to have the eggs cook very slowly for perhaps 8 to 10 minutes, as in this way they are cooked through more thoroughly.

Eggs cooked in this manner have an entirely different flavor from soft boiled eggs, and the yellow is cooked slightly more than the white. Do not make the mistake of boiling the eggs on the fire for even a moment, as the water must always be practically below the boiling point. As the heat of the water decreases, the inside temperature of the egg increases, and in this way perfectly even coagulation takes place, and the outside next to the shell is not toughened.

If it is desired to use hard-boiled eggs for a picnic, the eggs may be left in this same water for 30 minutes, at the end of which time they will be as hard as any ordinary hard-boiled egg, but will not be tough and leathery, and in this condition will really be easier to digest than either a raw or a fried egg.

French Omelet. To 2 ozs. of milk add an egg. Put in a dry frying pan over a slow fire, and beat the milk and egg together. Stir and beat constantly so that it does not stick to the pan, and continue this until the mixture assumes a jelly-like consistency. Do not fail to keep

on stirring the mixture even after it has been taken from the fire, as the frying pan will retain a good deal of heat which will continue to cook the egg. Serve in sauce dishes or egg cups. You will find that 1 egg prepared with 2 ozs. of milk in this way will serve one person, and exactly fill the large end of an egg cup.

A variation may be made in this omelet by leaving out the yellow of the eggs and only using the whites, when it will be found that a great deal more of the omelet can be taken without producing biliousness. The entire egg may also be cooked in much the same manner, with water in place of milk. However, only 1 oz. of water should be used to each egg, and you will have to be particularly careful in stirring the mixture rapidly enough to keep it from sticking to the pan.

Poached Eggs and Milk. To each 4 ozs. of milk add 1 egg. Pour in a dry frying pan, and cook over a slow fire. Bring the milk up over the yellow of the egg with a spoon, so that the yellow will cook as quickly as the white. Sometimes you will find it advantageous, after the cooking has continued for 2 or 3 minutes, to hold the frying pan under a broiler, so that the egg and milk will cook on top as much as on the bottom. This may be served poured over Melba toast, with butter and salt added if desired.

Cheese. This is a valuable proteid food for those who are partial vegetarians, but are still willing to use dairy products. Because of the large fat content in all cheese it is very difficult of digestion, and never makes a perfect substitute for animal flesh proteids, but may be used occasionally by those of strong digestive power in place of meat.

Cottage Cheese. This type of cheese is best made by allowing milk to stand over for several days until it is

sufficiently sour, so that the curd and the whey are well separated. The curd and whey should then be beaten together, and the mixture put in a cheese cloth and hung up in the sun, so that the whey drains off while the curd is being slightly warmed. You will find this method of preparation far superior to any you have used before, where the milk has been warmed on a stove, as this treatment on the stove renders the food elements in the cheese tough and indigestible.

The cheese will taste better if the whole milk is used, but will however be a better typical proteid food and more easily digested if the cream is first removed, leaving only the proteid behind. The kind purchased in stores and from milk dealers is never as good as that prepared in the way I have described, but may be used without harm by those who are unable to prepare milk at home. The Neufchatel cheese is a kind that may be purchased in most stores, and is simply cottage cheese with all of the whey pressed out, and put up in convenient tinfoil packages.

Cream Cheese is the kind sold commonly in stores under such names as "Cream Cheese," "Full Cream Cheese," "York State Cheese," etc., and is the most wholesome variety that can be purchased next to cottage cheese or Neufchatel. This cheese, like all others, should be eaten in place of meat and not in addition to it, and because of its concentrated food value should always be used with non-starchy and salad vegetables. It is one of the most indigestible of all of the proteids when it is cooked in any way, and should not be cooked with macaroni, spaghetti, or any meat dish, such as crabs, lobsters, etc.

Gelatin is a food substance which is a form of proteid, and of great value to the body as a food. It is especially

valuable for those who have a tendency to have nose-bleed, and for women who are habitually subject to profuse menstruation, as it supplies a form of proteid which makes the blood coagulate more easily. It is a good plan for anyone in good health to use some gelatin two or three times weekly. It may be prepared from packages of dried gelatin and added to a salad, or used as a dessert in the form which is most commonly sold under the trade name of "Jello." A small amount of whipped cream may be added if desired.

Frogs' Legs are a wholesome proteid food if prepared by broiling, but should never be fried, as the particles of meat are so small as to be rendered indigestible because of being coated with the fat from frying.

Turtle. The meat of the turtle is best prepared by cutting in the form of steaks and broiling in plain water until it is rendered tender enough. Few people are familiar with the preparation of this meat at home, and it is usually spoiled in restaurants by preparing it with highly seasoned sauces, in which condition it is really not a good article of food at all.

NOT SO GOOD

Dried Beef. The advantage in using this kind of beef is that it may be taken on trips where other meat cannot be secured, and if it is properly prepared, is a good way to use beef meat. It should be cut in thin slices and par-boiled slowly for a few minutes, and then taken from this water and boiled again in other clean hot water. This beef should be served, after being properly cooked, without sauce of any kind, such as is commonly used with it. It is not objectionable, however, to season it when on the plate with a small amount of butter.

Pork is a wholesome proteid if properly prepared by roasting. However it is very difficult to digest, and those who are suffering from digestive disorders will be better off if they avoid the use of it altogether, until such time as their digestive apparatus has improved sufficiently to be able to take care of it. Remember there is nothing poisonous about pork meat, as is generally believed, but the trouble with it is that no matter how much it is cooked there is still a large percentage of fat so interwoven with the proteid part of the meat as to render the latter indigestible. Fresh pork is always preferable to ham or bacon, but a small piece of well-broiled ham or bacon may be used with eggs at breakfast time without any harmful result, providing too large a quantity is not taken.

Fresh Tongue. If this meat is fresh, and is prepared only by boiling, it can be used with very little harm, but is not as easily digested as the proteids in the "good" class. In the use of this proteid the great fault lies in the universal tendency to overseason it with too many condiments and sauces.

Veal and Lamb. Veal or lamb steaks and chops may be broiled in the same way as beef, or a leg of either may be roasted the same as mutton. The objection to veal and lamb is mostly that they are immature meats, and all immature meats are more difficult to digest than mature.

Wild Fowl and Game may be used in season, if one has a particularly strong appetite for this class of food, but there is no doubt that wild duck and wild rabbit are less wholesome than those raised for eating purposes, as the flesh seems to contain more poisonous substances after death. The flesh of game is in an especially toxic condition if it has been killed after a long chase, and

should always be quickly bled and drawn and put in a cool place. It is generally believed that the flesh of animals living in a wild state should be more wholesome than that of domesticated animals, but this is not actually the case, and we have been able to raise better animals and game for meat than nature is in the habit of doing.

Salted Cod Fish is not a good fish as ordinarily prepared, but may be rendered so if it is parboiled in at least two waters, and then boiled for a long time. It is never quite as good as fresh cod, but may be used where the other is not available.

Salmon. There seems to me to be no very good reason why this should not be a good fish food, but actual experience shows that it is hard to digest, and that many more hours are required for digestion than with the other fish that have been named in the "Good" class.

Lobster is probably the best of the shell fish, if it is prepared properly, but patients must be warned against its use when cooked in the common ways in which they have been accustomed to having it served. It should be prepared by being boiled in plain water, or broiled. After being served it can be seasoned with a small amount of butter and salt if desired, and should be eaten with only non-starchy and salad vegetables. No creamed sauces or mixtures with cheese can ever be allowed unless you wish to have serious digestive disturbances.

The lobster has developed a bad reputation as a food, and it has been because of the universal method of preparing it with cheese and milk, which combine to make it almost impossible of digestion. It will remain in the stomach for 12 or 15 hours when eaten after being prepared in this manner, and will then leave the stomach practically undigested, often causing intestinal cramps, dysentery, and ptomaine poisoning.

Shrimps may be used, if the diner is satisfied to eat them when they have been boiled in plain water only, and are served without dressing. They must always be taken in place of meat and never in addition to it.

Clams and Oysters are only good as food if the muscular part only is used, and the stomach portion discarded. Clams and oysters are both scavenger shell fish, and their stomachs contain at all times an accumulation of rotting proteid material which the clam or oyster has succeeded in sucking up from the bed of the ocean. Sometimes this material is of a more poisonous nature than others, and will occasionally even cause acute poisoning. There is no known way of telling whether or not this is going to take place, and the freshness of the oyster has nothing to do with it. There are few people who would be anxious to eat them if this poisonous condition depended upon the manner of preparation, so they should be practically tabooed by anyone zealous in searching for good health.

Crayfish is a kind of lobster which abounds in the Pacific, and only differs from ordinary lobster in that it does not have large claws. However, the meat is exactly the same, and it may be used in any way that lobster can be used.

Nuts are a form of proteid recommended mostly by vegetarians as a substitute for meat. I have made many experiments in an endeavor to use nuts in place of the meat proteids, but have never yet been able to find that I could get any more satisfactory results with patients than if they lived on pork, salmon, lobster, and others in the "Not So Good" class. Most nuts have a very high percentage of fat, and I am of the opinion that this interferes with the proteid digestibility. If they are used in place of meat it will take several hours longer for the stomach to digest the meal and get the material com-

pletely into the intestines. This involves a waste of energy without a gain of anything in particular so far as I have been able to discover.

Nuts may, however, occasionally be substituted for meat in order to add variety to the diet. Peanuts, cocoanut, and chestnuts should not be considered in the proteid class, as they contain such a large amount of starch and so small a quantity of proteid.

There are many nut butters in the market, put up as substitutes for ordinary butter, which are really very poor substitutes indeed, as they contain so much cocoanut or raw peanuts that they are 60% to 80% starch, and are miscalled "butter" when ground up into a paste. Cow's butter contains 100% fat, and is in no way similar to nut butter, and the latter should never be substituted for the former. A case I handled recently will show you how different the effect of the two butters may be. A child 10 years of age, who had suffered from asthma since birth, was brought to me for advice. After a fast of a few days all asthmatic symptoms disappeared, and the child was placed upon a well-balanced diet, free from all starches. Her health improved in every way and she had no more asthmatic attacks or wheezing for about two months, when she suddenly started having an attack about every other day. As she was still on the strict non-starchy diet I could not account for the return of the wheezing, but after the mother was questioned closely it came to light that the day before this last series of attacks started she had commenced giving the child nut butter as a substitute for cow butter, under the belief that it was more wholesome and was an exact substitute. I assured her that she was feeding her child a large amount of starch in the raw state, which is the most difficult kind of starch to digest, and that I would as soon have her eat

a piece of white bread (a thing I never recommend at any time) as to use that particular kind of butter. Of course, she did not understand what she was doing, and thought she was acting in the right way because someone told her nut butter was such a healthy food. As soon as the cow butter was again used in place of the nut butter the asthmatic attacks ceased at once, and have never appeared again in over six months.

Roquefort Cheese is quite a strong tasting cheese, and would not be relished if enough of it were used to supply the meat element in the meal. For those in good health who are very fond of this cheese, a very small portion may be used with a piece of water-cracker, as an after-dinner delicacy. But remember, only a very small portion should be taken, and not more than one small hard water-cracker, or a small piece of toast.

Cat Fish and Mackerel are two fish that are not good for anyone with weakened digestive ability, as they contain such a large percentage of fat.

Crab Meat is similar to Lobster, and should be prepared by boiling, after being taken from the shell. It may be seasoned with butter and salt. No sauces or dressings of any kind whatever should be used. It should furnish the meat substitute at the meal, and should be combined with only salads and non-starchy vegetables.

Domestic Duck may be used occasionally, and should be roasted the same as chicken. There is nothing particularly harmful about duck meat except that more time is needed for its digestion than with other tame fowl such as turkey and chicken.

Domestic Goose is better than wild goose, but because of the large amount of fat it contains it cannot be considered as valuable a food as turkey or chicken. Its occasional use by those in good health is not likely to be detrimental.

NOT GOOD

Heart. This organ should not be used for food, because the muscles contain so much thickened blood on account of its being the last organ in the body to stop functioning. As the death of an animal draws near, the circulation stops in the extremities first, and then the other parts of the body die slowly, until circulation finally comes to an end in the heart organ, and death ensues. This causes an accumulation of many more times the normal amount of poisons in the heart tissues, and there is no way of preparing this organ for food whereby these toxins can be eliminated.

Kidney. This is one of the eliminative organs, and is used in throwing out some of the worst poisons and toxic materials which the body has to deal with. At death, many of these impurities are retained in the kidney, rendering it an unwholesome organ for use as a food. You are no doubt familiar with the odor that comes from a kidney stew, which is the same as the odor from the strongest urine, and is caused by the enormous excess of urea and uric acid in the cooking kidney meat.

Liver. This organ is commonly used for food, and is prepared by frying, and also by being mixed with other meat and ground into sausage. In any form in which it can be prepared it is a very unwholesome food, containing a tremendous amount of biliary poisons and toxins. At death the liver is literally choked with these poisons, and they cannot be eliminated by any process of cooking with which I am familiar.

Lungs are also eliminative organs, and contain certain poisons which the lungs during life eliminate in the form of gases. At death, because of the sudden cessation of lung functioning, these poisons accumulate, and they cannot be removed from the tissues.

Smoked and Pickled Tongue are not desirable for food, because they cannot be properly digested after being cured in these ways. Spiced meats, which are so commonly sold in delicatessen stores, will always cause digestive disturbances, and the seasonings in which they are cooked will invariably produce flatulence.

Pork Sausage should never be used for food, even if it is made in the best way possible at home, as it cannot be sausage unless it contains a large amount of fat, and cannot be cooked as such unless this fat is present. This large amount of fat renders the proteid indigestible. The kind sold in most meat markets is very poisonous, but even though the sausage is made from good meat, no one in good health should take any chances in using it as a food. It is almost the only cause of ptomaine poisoning, and out of hundreds of cases I have handled of this form of poisoning, there were almost none where sausage had not been used at least a day or two before the acute attack.

It seems that even a small piece of sausage which has not been chemically changed by the digestive juice because of the large amount of fat present in it, will lodge some place in the intestines, and sometimes it will be several days before the patient will have diarrhoea and cramps trying to expel it. This poisoning is so prevalent that it is the height of folly to take a chance with this kind of meat.

Bologna and Hot Dog are generally not made from the best of meat, and usually are too highly seasoned with garlic, etc., to make a desirable food.

Corned Beef is usually prepared from beef meat which cannot be used for any other purpose, and a large amount of saltpeter is employed in its preparation. It is not corned beef unless this saltpeter is used, and this

has a very depressing effect upon the sexual functions, and is injurious to the system in many ways.

Brains and Sweetbreads are not good articles of food, mainly because they are prepared improperly. I do not know of any tasty way in which they can be cooked which will not render them indigestible.

Pickled Pigs' Feet are really not a good meat food, as they contain very little proteid, and interfere with the digestion of other foods because of the vinegar used in their preparation.

Limburger Cheese is an unwholesome cheese, being full of millions of putrefactive bacteria, which only add to the poisonous bacteria usually found in excess in the intestines of most people. It is a rotting, unwholesome cheese, and only enjoyed by those who like "queer" things.

Canned Fish is subject to rapid changes after being removed from the can, and that part which cannot be used at once should be thrown away and not held over for another meal. In any case it should only be used when no other good proteid food is available.

Salt Mackerel is very indigestible, being toughened by its preparation with salt, and as even fresh mackerel is difficult of digestion, after it is salted it is almost useless as a food, causing so much indigestion as to more than offset any good that could be derived from it.

Hamburger Steak is usually made from a poor quality of meat, and even if ground round steak is used, the fat which is mixed with the proteid renders it indigestible. The Salisbury steak, as described in the section on "Good" proteids, should be used by anyone who is desirous of using ground beef. This Salisbury steak may be used day in and day out without any ill effect, and is one of the most valuable ways in which to use beef, but

the addition of fat in Hamburger steak really makes such a big change that it should not be taken at all when the Salisbury steak is so easily available.

PROTEIDS

I have found that it has been possible to simplify the regulations governing the use of the different foods by drawing up a set of rules which should be committed to memory, and which can be regarded as a positive guide in the selection of suitable meals. The proteid rule is:—

“USE ONE PROTEID ONLY WITH ONE OR MORE COOKED OR RAW NON-STARCHY VEGETABLES.”

As an amplification or extension of this rule, raw or cooked tomatoes may be added, and sweet sugar fruit or jello if desired. This means, in practical terms, that with your roast beef you should not take any potatoes or bread, but should content yourself with filling up on the non-starchy vegetables, both cooked and raw. A sample meal and a good selection would be any one of the following:—

1. Roast beef, cooked spinach and asparagus, head lettuce, stewed prunes.
2. Broiled chicken, cooked celery, with salad of lettuce and tomatoes.
3. Belgian hare, cooked string beans, summer squash, raw celery, jello.
4. Filet of sole, and salad of lettuce, tomatoes, and cucumbers.

(For more complete details see chapter on Combinations on page 289.)

CHAPTER III

STARCHES

The main bulk of food on most tables consists of starchy material, and I believe that the large amount of starch generally used is far in excess of the natural demands of the body. The primary use of starchy foods in the diet should be to supply the body with heat and energy, but this does not require a very large amount daily in the average adult, and any quantity used over and above what is absolutely necessary will have nothing but an injurious effect upon the body, producing fermentation, with stomach acidity and flatulence, also catarrh, tonsillitis, throat trouble, skin eruptions, liver and kidney disorders, etc.

A person of the strong digestive type will be able to use more starchy food than people of other types, provided that it is sufficiently masticated, and that vigorous exercise is indulged in to use up the energy accumulated. The brain worker, however, will have very little use for starchy food, and can get along on a very small allowance, provided enough proteid is used to supply the needed nerve energy. Those people of a nervous, bilious temperament, and particularly those with dark complexions, will find that an excess of starches will produce a great many troubles for them, and unless their starch supply is limited to the minimum, such diseases as high blood pressure, hardening of the arteries, rheumatism, gall stone and kidney stone, enlargements of the thyroid gland, and (as already suggested) all the catarrhal diseases, lie in wait for them.

The same material which the laundries use to stiffen collars and cuffs, and the paper-hanger uses for making

paste, will paste up the intestines if used in excess, and will be the cause of more disease than any other element of food in use on the modern table. Why then is so much taken, and why do we see every table loaded with a variety of starchy foodstuffs?

My own opinion is that man has fallen into the habit of using too much starch because first of all he receives a large bulk of food for his money, which is easily made into palate-pleasing mixtures, and which fills up well. It also keeps well before being prepared, and large quantities may be conveniently stored for use as required. Then again starch is very stimulating, and while it produces real heat and energy when used properly, it is on the other hand a great stimulant if used in excess or in wrong combinations with other food, and in this way seems to give much energy which is only stimulation and not of lasting benefit. This stimulation is closely allied to the apparent strength-producing action of alcoholic beverages.

When starch is perfectly masticated, the time taken up in this operation will aid you in regulating the proper amount to take, and prevent you from using too large a quantity. Starchy food should always be held in the mouth for a long time and completely insalivated (mixed with saliva), care being taken to avoid eating and swallowing too rapidly. Those starches which are cooked in a mush form need just as much mixture with saliva as those that are more fibrous, and should not be swallowed until such mixture takes place.

The digestion of starches begins in the mouth, and it is the failure to recognize this important point that brings about so many digestive disturbances. Starch requires the most complete mastication and insalivation of any of the food materials taken into the human body.

By the saliva, or digestive fluid of the mouth, the starch is partly changed into sugar, if given the opportunity by sufficient admixture. Thus changed, the starch passes down into the stomach organ, where it undergoes little further change. From the stomach it enters the small intestines, where it is mixed with the bile which is poured into the intestines at this point by the liver, and still further changed, becoming more easily assimilable, and in this way more readily absorbed through the walls of the small intestines. A certain quantity, of course, passes on, but the amount that enters the circulation through this process of assimilation and absorption is carried to all parts of the body, and through a process of oxidation liberates heat and energy.

Bear in mind then that the saliva itself is alkaline, the gastric juice in the stomach acid, and the bile in the intestines alkaline. The starch needs the saliva, but should pass quickly through the stomach, as it does not need the gastric juice. Starches are always delayed in the stomach if mixed with proteids, acids, or sugars, and consequently become too acid and ferment when they come in contact with the bile in the intestines which is alkaline. This produces auto-intoxication and gas, with all the attendant symptoms and diseases which arise from these conditions.

It is generally advisable when using starch to combine it with enough non-starchy and salad vegetables to supply plenty of bulk, as such mixtures will digest more readily, and will not produce flatulence. If starches are used carefully they may be of great value in the diet, but on the other hand are dangerous foods if improperly used, and a study of the pages following will enable you to learn this valuable lesson in dietetics, i. e., how to use and how not to use starchy foods.

The following is a list of the principal starchy foods, arranged in the same manner as the Proteid list:—

GOOD	NOT SO GOOD	NOT GOOD
Potatoes	Buckwheat Flour	Yeast Bread
Green Corn	Oatmeal Gruel	Rye Bread
Macaroni	Rye Flour	Pumpernickel
Spaghetti	Fresh Lima Beans	Buns
Vermicelli	Green Peas	Rolls
Noodles	Wafers (Salt)	Graham Bread
Hubbard Squash	Popcorn (Salt)	Graham Crackers
Rice	Graham Flour	Cakes
Corn Bread	Ordinary White	Cookies
Corn Meal	Flour	Ginger Snaps
Wheat Flour Biscuits	Fried Potatoes	Macaroons
Whole Wheat Flour	Lentils	Doughnuts
Whole Wheat	Cocoanut	Lady Fingers
Gluten Bread	Raw Peanuts	Puddings
Shredded Wheat	Chestnuts	Rice Pudding
Barley	Hominy	Tapioca Pudding
Canned Corn	Sweet Potatoes	Tapioca & Apples
Water Crackers	Succotash	Corn Starch
Carrots		Sago
Turnips		Navy Beans
Parsnips		Kidney Beans
Beets		Boston Brown
		Bread
		Bananas

GOOD

Potatoes. These constitute one of the finest forms of starchy food, although they only contain from 14% to 18% of starch. I place the potato at the top of the list because I consider it one of the most valuable of the starchy foods, and not simply because of the quantity of starch it contains. White bread contains four times as much starch as potatoes, but if used in excess is about four times as injurious as the latter. If potatoes are used in proper combination with other foods, a larger amount can be eaten without injury than of any other starch.

I believe the best way to prepare them is to wash them well with a vegetable brush, which should always be kept in the kitchen for this purpose. The potatoes should then be boiled in plain water for a long enough time to enable them to become soft. All starchy food requires long cooking in order to break up the starch cells and render them more easily digestible. Potatoes cooked in this way with their skins on will have a better natural flavor than if they are cooked in any other way. They should be eaten without removing the skin, which contains valuable vitamins and organic salts. The only part of the potato that is anything more than starch and water is the skin, and if this is removed the valuable bone and nerve building elements are lost.

Baking the potato is probably the next best method of preparation, making a very wholesome and tasty potato dish, but it will be observed that the skin must be so well cooked by this method, in order to insure that the inside of the potato is sufficiently soft, that the outside is burned to such an extent that the nourishing part just under the skin is completely killed. It is true that just under this burnt material will be found some dextrinized starch, but the organic salts will have been entirely destroyed. However, if sufficient salad and non-starchy vegetables are used this deficiency of vitamins will not be felt, and the person eating the potatoes will not suffer from their lack.

Potatoes may be boiled after they are peeled, but this is never as desirable as if they were cooked in either of the above ways and the skin not removed. They should not be prepared by frying, but mashed potatoes may be used if made with cream and a very little milk, only remember they need thorough mastication.

Green Corn in season may be used with good results,

and in larger amount than canned corn, which is more starchy. No matter how carefully green corn is masticated, a great many kernels come through in the feces apparently without having undergone any great change. When much corn is eaten the bowels move quite freely because of the large quantity which has really not been properly digested, but which nevertheless passes through so quickly that it does not ferment. The hulls in this condition are very tender, and do not scratch or irritate the intestines as they would if the corn were dried and not properly pulverized.

It is neither necessary nor advisable to cook the corn for a long time, as the starch cells of green corn are very readily digested even in a raw state. Green corn may be eaten from the cob, or may be cut off and served with a small amount of cream, or seasoned with butter. In case cream is used it should be warmed slightly by placing the bottle of cream in a pan of warm water, and then pouring over the warm corn which has been removed from the cob, just before serving. Canned corn is about three times as starchy as green corn, and a much less quantity should be used.

Macaroni, Vermicelli, Spaghetti, Noodles. These are called "paste" foods by the Italians, and are made out of white flour and water. Sometimes eggs are added to the mixture, but the cheapest kinds are composed of nothing but flour and water, and are probably more desirable as a starchy food than when the eggs are added. It is the cheaper kind, minus the eggs, that I usually recommend to patients who want to use this kind of starch.

The best way to prepare these foods is to cook them in boiling hot water, without the addition of any kind of seasoning. When taken from the water, season with but-

ter or cream. Sometimes it is desirable to pour off the water and add the cream and butter to the pan in which they have been cooked. Under no circumstances, however, should cheese, either cooked or raw, be added, and tomatoes should never be used in any way with any one of these starches. The malic acid in tomatoes is very strong, and should not be used with starches any more than vinegar should. If you have never prepared these pastes in this manner you do not know how good they will taste, and you have a treat in store for you the first time you try any one of them, if prepared as described above.

Hubbard Squash is a very tasty starch food, and is equally as digestible whether baked or boiled. If boiled and mashed, cream and butter may be added if desired, in the same way as with mashed potatoes.

Rice. White rice is the kind most commonly used, and may be either polished or unpolished. The polished rice has been prepared in this way by first of all removing the hull, and then tumbling the rice about in barrels along with a certain kind of polish which adheres to it and preserves it against dampness, and also against mites and bugs. This does not injure the rice in any way, and may be easily removed if the rice is washed in several waters. The Chinese wash their polished rice nine times before finally cooking it. This kind of rice should be soaked overnight, and boiled for at least an hour in unseasoned water. The best method available for the everyday housewife is to cook the rice in a double boiler for a long time, without stirring, so that the grains of the rice will not be mashed up.

The most desirable method of preparing rice or any other grain is with the fireless cooker, or with the steam-pressure cooker. If you own either of these cookers you

will find satisfactory directions are given for preparing any grains. Whole rice may be purchased in some Health Food stores, and has the advantage of having a more delicious flavor, besides containing more organic salts, these being found in the outer covering, which covering is removed in the case of the white rice.

The rice should be served after cooking with butter or cream, and in no case should sugar be used either in the commercial form or by the addition of sugar fruits. Rice pudding is rendered unfit for food because of the sugar and raisins which are added. The rice will always ferment with this mixture, and produce excessive amounts of intestinal gas.

Corn Meal is a wholesome starch food, and may be made into muffins or corn bread by using the proper mixture of milk and eggs, and adding baking powder as a raising agent. Sour milk and soda may be used, but I do not consider this as desirable as baking powder, because the action of the baking powder can always be depended upon to be the same, but it is impossible to know when the mixture of sour milk and soda is perfect.

Corn meal flour should be used without adding any wheat flour, as the two kinds of starch do not digest well together. To 1 cup of corn meal add 1 cup of milk in which 1 egg has been beaten up. After this is sufficiently mixed, add half a cup of corn meal in which has been stirred a teaspoonful of baking powder. Mix this rapidly with the other mixture, and put in muffin tins or a cake tin, then place in a hot oven. Turn the fire down immediately, so as to allow the corn meal to cook through sufficiently. You will find that when no white flour is used it will take longer for the corn meal to cook, and if too much heat is used the outside will burn before the inside is thoroughly cooked. Corn meal may be used

in the form of mush, and if used in this way should be cooked for at least one hour on a medium fire, and served with butter or cream, but no sugar.

Baking Powder Biscuits. The only way in which white flour may be used as a food is when it is cooked in the form of baking powder biscuits. These should be made with flour, eggs, and milk, adding baking powder as in the preparation of corn meal muffins. They should be made very thin, so that they can be thoroughly cooked through. They should not be used in addition to any other form of starch at the meal, but should supply the main starch food, and be properly combined with non-starchy and salad vegetables.

Whole-Wheat Biscuits can be made out of the entire whole-wheat flour in the same way as the baking powder biscuits are made. This whole-wheat flour, made from the entire grain, is not obtainable in the ordinary grocery store, but must be secured from some Health Food store where they have a special grinding machine for grinding the entire whole-wheat grain. The whole-wheat flour sold in most grocery stores is a mixture of a low grade of white flour with "middlings" added. It is called "Graham," whole wheat, cracked wheat, and entire wheat, according to the mixture of middlings or bran which it contains. If you cannot obtain the real whole-wheat flour from your grocer, I will be glad to furnish you the names and addresses of different pure food companies who will send it to you by parcel post. Muffins made out of the whole-wheat flour must be made thin and cooked very slowly, otherwise they will not cook thoroughly.

Whole-Wheat Flour may be used by cooking it as a mush, in which case it should be cooked for a long time,

in the same way as corn meal mush, and served by seasoning with cream and milk—no sugar.

Whole-Wheat Grain. The entire whole-wheat grain in its natural state, if soaked overnight and cooked for a long period of time, will be found to be a most desirable breakfast food, and far superior to any of the pre-digested health foods which are sold on the market. This whole grain may be purchased from food stores, and is called "cleaned wheat," although as a general rule it is not sufficiently cleaned, and will be found to contain small pieces of stone the same size as the grain. If you chance to bite into one of these pieces of stone you are liable to lose your appetite for the wheat, so I advise you to buy the whole-wheat grain from the same Health Food companies as sell the real whole wheat, as they use particular care in cleaning the wheat so that no stones or other foreign material remain.

Gluten. Gluten bread is recommended by many dieticians because it is supposed to contain a smaller amount of starch than ordinary white bread. Analyses of the different gluten breads on the market, however, show that in the preparation of the gluten flour only 1% or 2% of starch is really removed. Unless one is very fond of the flavor of this bread it has no value over any other bread, and is much more expensive.

Whole-Wheat Bread may be obtained from some Health Food stores in some of the larger cities, but it cannot be made satisfactorily at home. Most grocers will assure you that they sell whole-wheat bread, when it is really made from the imperfect mixture of middlings and white flour sold as whole-wheat flour. If the bread is made of the entire whole wheat it will be very hard, and cannot be made into a large loaf. The best way to pre-

pare whole-wheat bread at home is in the form of the whole-wheat muffins described in the foregoing.

Shredded Wheat Biscuit is the trade name of a certain shredded whole-wheat product. This makes a delicious toast if the biscuit is broken open and retoasted under the broiler. Because of its being so brittle it can best be eaten by pouring hot water over it, and then seasoning with butter. It can then be eaten with a spoon, and is a very tasty substitute for toast.

Barley. This may be purchased in the ordinary stores under various trade names, and should be prepared the same as the entire whole-wheat grain, by soaking overnight and cooking for at least an hour. Serve with cream and butter the same as other mushes, but use no sugar.

Water Crackers. These may be used in place of other starches if one is particularly fond of them, and by being broken open and roasted can be made a very desirable toast. They are really a kind of hard-tack, and may be taken on camping trips in place of bread.

Carrots, Turnips, Parsnips, Beets. These tuber vegetables contain from 5% to 12% of starch, and should be used as a starchy food except when they are very small. You will notice they are also to be found in my table of non-starchy vegetables, but special attention is called to the fact that they must be small and immature, in which condition they contain only about 5% of starch. When they are full grown they should always be classed as starchy vegetables, and may be prepared in a variety of ways. They should always be washed well with a vegetable brush, and should never be scraped in the slightest degree, as this removes the organic salts under the skin, and destroys at the same time much of the agreeable flavor. They may be boiled in plain water, and seasoned

with butter and salt when served, or they may be prepared by grinding one or more through a vegetable grinder and then baking this ground-up material in a cake pan in the oven. See also the instructions regarding these four tubers in the chapter on non-starchy vegetables.

NOT SO GOOD

Buckwheat Flour, Oatmeal Flour. Are used in many different ways in the preparation of foodstuffs, but are quite irritating to the alimentary tract, and are the direct irritating cause of many skin diseases. I do not recommend them as a wholesome kind of starchy food, but they may be used when no better starch is available.

Rye Flour is very hard to secure in a pure form, but is usually mixed with wheat flour the same as the ordinary whole-wheat flour. If you can secure the raw flour which is not mixed with wheat flour, very delicious muffins can be made from it, using the same caution in cooking as with the whole-wheat muffins, that is cooking them slowly and quite thin, so that they may be cooked thoroughly through.

Fresh Lima Beans are relished by many, and when they are small have a small amount of starch, but as they grow larger the starch develops in them, and they will then easily cause flatulence in the same way as other dried beans.

Green Peas when matured have a similar composition to navy beans, and are gas-forming with some people whose digestive power is not normal. If they are very young and small, they may be used in the non-starchy class.

Wafers are ordinarily made from white flour and water, and are seasoned with a large amount of salt. They

would make a good starch food if the salt were not present. If they are used they should constitute the main starchy part of the meal, and should not be used in addition to any other starches.

Popcorn is a form of starch which is easily digested when it is cooked in the usual way, that is, by heating the popcorn till it pops open, splitting the kernel wide open and exploding the starch cells. It may be used as the principal starch part of a meal, and should be seasoned with butter or salt.

Ordinary White Flour. If this is taken at all it should be used as described in the making of baking-powder biscuits, and should never be used to thicken gravies. Cake and pastries, which are made principally from white flour, are always unwholesome foods, and should not be used by one who wishes to enjoy perfect health.

Fried Potatoes should not be used when any other starch can be procured, but if they are used the French fried potatoes are the best. These are prepared by dropping small pieces of potato in boiling hot grease, preferably olive oil, Crisco, Mazola, or some one of the vegetable oils. The grease must be very hot, so as to dextrinize the outside of the potato, and at the same time prevent the grease from soaking into the inside. After cooking, the grease should be drained off as much as possible by holding the potatoes in a sieve.

Lentils contain a large proportion of starch, but also have a considerable amount of the proteid element, being similar in this respect to dried beans, and fermenting easily. The best way to use lentils is to cook them for a long time in the form of a soup, adding whatever non-starchy vegetables, such as celery and asparagus, may be desired. Bear in mind that this lentil soup should be cooked at least two hours, used as the starchy part of the

meal and not in addition to other starches, and eaten very slowly.

Cocoanut, Peanuts or Chestnuts. May be used in place of other starches if there is a strong desire for them, but used in the raw starchy form will take about twice as long to digest as any of the other good starches. A pleasing change may be made if either of these foods be baked or boiled. Cocoanut must be cooked a long time so that the fibre is thoroughly softened, and it should then be served as a starchy food in place of potatoes, macaroni, rice, or other starchy food, and should not be used in addition to them. Unshelled peanuts may be baked in the oven in a pan, cooking them slowly until the starch is well cooked, or the baking may be continued until they turn brown and become dextrinized. In either case, with the addition of a little salt and butter, they make a fine starchy food, if used in this way. Chestnuts may be cooked in their hulls in the same manner, and will be found to be more thoroughly cooked through if they are left in the oven for a long time with a low fire. After they have cooked for at least 30 minutes in this way, more heat may be turned on, and this sudden addition of heat will pop them open and slightly dextrinize them on the outside. It may seem queer to use any one of these so-called "nuts" in this manner, but I assure you they will make an enjoyable starchy part of any meal if so prepared.

Hominy may be used as a good starch if it is soaked in water for several hours, and then washed in two or three washings of hot water so as to remove the irritating elements used in its preparation. It should then be boiled slowly for at least half an hour, and seasoned with butter or cream only.

Sweet Potatoes are not as good a starch as Irish potatoes, but if they are used, the best way to prepare them is to bake them for a long time in the oven, so that as much of the sweet potato as possible will be dextrinized. One should never use as large an amount of sweet potatoes as they might use of the Irish potato, because of the peculiar carbohydrate mixture in the sweet potato which makes it ferment easily.

Succotash is made from a combination of lima beans and green corn cooked together. This combination is not specially desirable, but if small lima beans are used, one with a strong digestive ability will not experience any difficulty in handling the combination. However, it should not be used in addition to any other starchy food, but taken as the main starchy part of the meal.

NOT GOOD

Yeast Bread. Any kind of bread made with yeast is unwholesome compared to muffins made with baking powder, or water crackers. The yeast is not entirely destroyed by cooking unless the bread is sliced thin and toasted all the way through. The opinion exists that in the ordinary baking of the loaf these yeast cells lose their power, but actual experiment has proven that this is not so, as all the bread in the center of the loaf, which has been left white, contains yeast cells which are still full of activity. These live yeast cells continue to develop in the stomach and intestines, thus producing additional fermentation and gas pressure. It is only by slicing thin and toasting all through, as indicated above, that the bread can be thoroughly dextrinized, and the yeast cells completely destroyed.

A united effort has been, and is being, made by yeast manufacturers, through the medium of high-priced "au-

thorities," to educate the public into believing that yeast is a desirable food. They claim that the yeast contains a large amount of vitamins, and consequently has a high food value, but the truth of the matter is that the vitamins are quite a negligible quantity, and that the fermentative processes set up by the yeast produce hyperacidity and digestive disorders which far outweigh the good of the vitamins. All the vitamins that the body requires may be secured by using a small amount of salad vegetables each day, and it should be understood that there are no vital substances in a cake of yeast which are not found in celery, spinach, etc.

Home-made bread is probably a good deal worse than baker's bread, inasmuch as larger quantities of it are eaten on account of the more agreeable flavor. This is also true of pies, cakes, pastries, etc., which are made richer at home than in the baker's shop, and are therefore more unwholesome as food. If the yeast bread is sliced thin and toasted brown all the way through, it will be completely dextrinized, and all the starch cells killed, and in this form is one of the most nourishing of the carbohydrate foods, being entirely changed from its original starchy form.

Rye Bread as purchased in the stores is made from a combination of wheat flour with a small quantity of rye flour. Because of the mixture of these two kinds of starches, it is never as good a bread as one made from either one or the other of the starches—that is to say straight wheat-flour bread or rye-flour bread is to be preferred to any admixture of the two. It is almost impossible to buy rye flour of the kind that used to be used in the making of pumpernickel bread, and when this bread is made at the present time it is a combination of white flour and rye flour that is used, the mixture being

seasoned with molasses, which gives it a dark color and makes it look more like the old-fashioned pumpernickel. However, I personally do not know of a baker in the United States who is making pumpernickel out of straight rye flour at the present time.

Buns and Rolls should not be used unless they are cut open and retooasted carefully in the oven so that they are dextrinized all the way through. You will find that a tasty kind of toast can be made from either buns or French rolls, if some of the center part is removed before toasting. They can then be toasted to best advantage under a broiler, placing the white part next to the fire and the side already browned away from the fire. In the same way these buns can be toasted fresh at a picnic, and will be more enjoyable than the soggy buns so often used for sandwiches on these occasions.

Graham Bread, as it can be purchased in the store to-day, is a mixture of muffins and white flour, and yeast is used for a raising agent. It may be toasted in the same way as white bread, but should not be used in any other form. The original Graham bread was made according to a formula which specified the use of a mixture of real corn meal and real whole-wheat flour, and was really entirely different from the kind that is found on the market today.

Graham Crackers are made from Graham flour with the addition of sugar, and as sugar and starch should never be combined together, these crackers are not a wholesome food, and the feeding of them to young children is a pernicious habit which will often be the means of starting digestive disorders. There seems to be a general belief that because crackers and cookies are "soft" children are consequently able to digest them easily, but there is no truth whatever in such a notion.

Cakes, Cookies, Ginger Snaps, Macaroons and Lady Fingers are all unwholesome cookies, and should not be considered a suitable food even by one whose digestion is strong. They certainly should not be used by young children.

Doughnuts are always hard to digest, and can never be considered a good food. No doubt the motive of the Salvation Army during the war was good, in giving the soldiers doughnuts, but I often wonder if the pleasure that they experienced in eating the doughnuts could make up for the physical depression which must have been caused by partaking of such an unwholesome food and one so difficult of digestion.

Puddings are always made from a combination of starch and sugar, and are often seasoned with acid fruit juices. I have never been able to discover a combination of food classified under the name of "pudding" which I could recommend even to healthy people. Rice pudding is probably the least harmful of the puddings when it is made with raisins alone, and no other sugar is added, but even then this combination will cause excessive fermentation.

Tapioca, Cornstarch and Sago are practically 100% starch in their dry state, and I do not know of any way in which they can be made tasty enough to use for food unless they are mixed with sugar, but this will always be an explosive mixture.

Navy Beans and Kidney Beans. All of the dried beans contain such a mixture of proteid and starch in the same food that they are always gas producers, and after much experimentation I have been unable to find any place for them in the diet of anyone who is living close enough to civilization to be able to secure other foods. Of course, they will sustain life for a long time, and there

are no doubt emergencies, such as a forced stay in the mountains, when no other food can be obtained, in which dried beans may be kept for a long period of time and used as needed. In such an event, they should never be used in addition to meat or any other starch, as sufficient proteid and starch are contained in them to meet all the body's requirements. The main objection to these beans is found in the fact that the combination of proteid and starch is such that fermentation of the starch is inevitable, although this fermentation will not be so pronounced if vigorous physical exercise is taken, such as might be necessary on a long enforced march.

Boston Brown Bread is often mistaken for a health food, but is made with so much sugar as to be rendered unwholesome.

Bananas are commonly recommended by dieticians as food, but I personally do not find that I can say much in their favor to patients, nor suggest them as a wholesome addition to the diet. The form in which we receive bananas is not a very natural one, as they have generally been seasoned by ripening in dark cellars, and really go through a process of rotting, with the result that the starch they contain becomes decomposed, producing a certain flavor which we have unfortunately learned to like.

When the bananas are allowed to ripen on the trees they have an entirely different taste, as they contain a large amount of sugar. In this natural state they are freely eaten by the natives as a food, but in the decomposed condition which they are in when we use them, a substance called amyl-nitrite is generated, which produces vascular dilation.

I do not know of a single article of food which produces so much catarrh as the banana. Patients of mine

who have remained free from catarrh for several months have brought on a cold within a few hours by eating a single dish of bananas. I have checked up on case after case and have found banana eating to be so commonly the cause of colds that it almost appears as if the effect produced were specific. It has been particularly noticeable in the case of small children who have enlarged tonsils and adenoids, and whose mothers have allowed them to eat bananas at almost any time of day because of the prevailing notion that they were a wholesome fruit.

Many authorities claim that cooking bananas increases their digestibility, but actual experience with many patients who have tried to eat them in this form has convinced me that cooking makes very little difference in their catarrh-producing effect.

HOW STARCH SHOULD BE COMBINED

When it seems advisable to take starch, always bear the starch rule clearly in mind. It is as follows:—

“USE ONE STARCHY FOOD ONLY IN COMBINATION WITH ONE OR MORE RAW OR COOKED NON-STARCHY VEGETABLES.”

This means:

- (1) That no kind of fruit should ever be used with starch.
- (2) That no kind of proteid should ever be used with starch, for example, that meat and rice should never be mixed.
- (3) That no two kinds of starch should be used together, such as bread and potatoes.

In accordance with this regulation, the following are a few typical specimen starchy meals, containing good combinations:

1. Baked potato, raw celery, lettuce and cucumbers.
2. Boiled whole wheat grain, cooked spinach, and asparagus.
3. Boiled macaroni, cooked summer squash, raw celery.
4. Cooked sweet corn, raw celery, cooked cucumbers.

You will find this question of satisfactory combinations more fully dealt with in the chapters devoted exclusively to combinations and menus, but the foregoing will guide you as far as we have gone and give you an idea of how to apply the general rule. There is no suggestion of priority about the order in which these combinations are quoted, that is to say No. 4 is quite as good as No. 1.

CHAPTER IV

COOKED NON-STARCHY VEGETABLES

This class of food should furnish the main bulk of the meal, yet it is usually the most neglected. I believe that even though writers on dietetic subjects understand the importance of the non-starchy vegetables in the diet, nevertheless they do not sufficiently emphasize their value because of the tendency to teach patients the use of those particular foods which contain a high calorie or food value. The non-starchy vegetables contain the smallest amount of food value of any foods which are used, and still they are specially valuable for the following reasons:

1. They contain the largest quantity of organic minerals, which are as necessary to the body as the foundation is to a house. They supply these minerals and vitamins to make up the nucleus of the nerve cells, and also furnish the solid part of other tissues, and the material for the building of bone.
2. They have an enjoyable flavor if cooked properly, and one can fill up well upon them on account of their furnishing so much bulk, without being under the necessity of taking a large amount of those "nourishing" foods which everyone is liable to use in excess.
3. They supply bulk material which can be used with the more concentrated foods, such as proteids and starches, and in this way they constitute a medium through which these foods can be more easily digested.
4. The bulk thus supplied will be the greatest aid in overcoming constipation, which is the mother of so many diseases.

It is almost impossible to overeat on any of the non-starchy vegetables, and those who are learning to restrict their diet will find they can satisfy themselves as easily by using a second helping of these non-starchy vegetables, instead of taking an additional amount of proteid or starch. You will also find it will be easy to overcome the habit of eating desserts if an extra dish of non-starchy vegetables is used instead. Of course, I do not believe it is ever a good plan to eat until you feel full, but those who have been in the habit of overeating will find they can cut down on the concentrated foods more easily if more non-starchy vegetables are used in their stead.

There are a great many of the leafy non-starchy vegetables growing wild, and patients should find it an interesting study to hunt out the different kinds that may be found in the fields. The following list classifies those which are most easily obtainable:—

GOOD	NOT SO GOOD	NOT GOOD
Celery	French Artichoke	Onions
Spinach	Brussels Sprouts	Garlic
Small String Beans	Cauliflower	Cooked Cabbage
Asparagus	Dandelion Greens	Leeks
Summer Squash	Kohlrabi	Chives
Cucumber	Small Mushrooms	
Egg Plant	Small Fresh Sugar	
Beet Tops	Peas	
Turnip Tops	Rutabaga	
Small Beets	Sauerkraut	
Small Carrots	Water Cress	
Small Parsnips	Swiss Chard	
Small Turnips		
Pumpkin		
Lettuce		
Okra		
Chayotes		
Oyster Plant (Salsify)		
Mallow		
Kale		
Zucchini		

GOOD

Celery is one of the very best of the non-starchy vegetables, and there is no disorder of the body where it can not be freely used if any kind of food is allowable. The best kind is that which has been bleached out so that it is white, as this bleaching process removes certain volatile oils which are slightly irritating to the body. Great care must be exercised in washing from the celery any poison which has been used by the gardener to kill bugs or worms. Blue vitriol and strychnine are the poisons most commonly employed for the purpose, and if it is good-looking celery without worm holes you may be sure that one of these agents has been used. The poison will remain in the inside parts of the head of celery, and can only be completely removed by taking the stalk apart and scraping each part thoroughly with a vegetable brush, afterwards washing in several pans of running water.

If it is desired to cook the celery it should be cut into small pieces and boiled in plain water for at least two hours. This time seems necessary to develop a certain flavor which the celery acquires if prepared in this way. Of course it may be cooked for only a few moments, and will still be a desirable food even if prepared in such a manner, but you will find the flavor to be entirely different if the two-hour period is used. No seasoning of any kind should be added to the water, but if the water is cooked out sufficiently a small amount of cream and butter can be added when ready to serve.

Spinach, Beet Tops, Turnip Tops, Mallow, Lettuce, Kale, should all be prepared in much the same way. After washing these leafy vegetables well they should be placed in a pan without any water except that which clings to the vegetable after washing. Put a cover on the pan and allow it to simmer over a slow fire for about ten

minutes, then turn the fire up and allow them to boil for five or ten minutes longer. In this way they will cook in their own juices, as the first ten minutes of cooking will draw the juice from the leaves so that sufficient liquid will be available for the cooking of the vegetables themselves. Do not remove the cover from the pan often, as the steam will escape if you do this, and more water will have to be added.

No seasoning should be used in the cooking. These greens are frequently spoiled by the addition of bacon or pork, and are usually salted, which not only destroys their delicate flavor but makes them indigestible, while if any grease is used in their preparation it will interfere with the digestion of other foods.

Small String Beans are the more desirable kind, as the beans in the inside of the pods are not so large. When the beans are large they produce fermentation and flatulence in the same way as navy and kidney beans. In case you cannot secure the small string beans it will be necessary to open the larger ones, either before or after cooking, and remove the beans from the inside. Fresh string beans are more desirable than the canned beans if they can be secured small enough, but usually this is a matter of such difficulty that most of the year you will find it more convenient to purchase the canned variety, being careful to use a brand in which the beans are very small. Of course these canned string beans are already cooked and only need to be warmed up, but the fresh string beans should be cut in small pieces and cooked for at least one hour in order to bring out the best flavor. I must warn you again not to use any grease in the preparation of string beans, as they are rendered indigestible by even the small piece of bacon that most people put in. They

should be seasoned with butter and salt as desired by the person eating them.

Asparagus should be used when it is fresh in the market to as large an extent as possible, but you will find it one of the most desirable of the canned non-starchy vegetables that can be obtained. The smaller varieties are to be preferred to the larger kind, which are more starchy. Cook the fresh asparagus in plain water, and do not season until ready to serve, when butter and salt may be added if desired.

Summer Squash, Cucumber and Chayotes are all in the non-starchy squash family, and are a very delicious addition to the everyday diet. Summer squash can only be secured in certain parts of the country during a limited season, but should be used as much as possible by those to whom it is available. Cucumbers may be secured nearly the whole year round, even though they are more expensive in certain seasons than others. Chayotes are only procurable in the Southwest, where they can be purchased in the market during the early fall season, and are often called "Mexican Squash," as they are found growing naturally throughout Mexico. These vegetables should all be cooked in much the same manner as the others, that is, in just enough plain water to cover them so that too much of the flavor is not cooked out in the water. They may then be mashed, and butter and cream added if desired.

Cucumber may be cooked with or without its peel, but if the peel is removed most of the strong acid, which is apt to irritate a delicate stomach, is removed along with it. If the chayotes or squash are fully grown they will have to be boiled, but it is better to secure the small tender ones if at all possible.

Zucchini, or Italian squash, is similar to the ordinary summer squash, and may be used freely if cooked in the same manner as summer squash. It is, however, difficult to obtain, being raised only in certain parts of the country.

Egg Plant should be prepared by boiling in plain water or baking in the oven. Probably the best way to boil the egg plant is to peel it and cut it in small pieces, cooking in just enough water to cover it. It may then be served, seasoned with butter and cream. If it is cut in two it can be baked more easily in the oven than if it is left whole, and the edible part may afterwards be taken out with a spoon in the same manner as with Hubbard squash. One of the most indigestible dishes served on the modern table is fried egg plant, which is literally soaked with grease and is really rendered entirely unfit for food. I take this special opportunity of condemning this method of preparing the egg plant, as it is practically the only way in which it is ever served.

Small Beets, Small Carrots, Small Parsnips, Small Turnips, may be used as non-starchy vegetables if they are very small and tender, and may be prepared in a variety of ways. No matter how they are cooked, the peel should never be removed. They should not even be scraped, but should only be washed with a vegetable brush, after which they should be boiled whole in plain water and served in that manner, or cut in small pieces and boiled in just enough water to permit their being mashed afterwards.

A very desirable way in which to bring out the flavor of any one of these is to grind through a vegetable grinder and cook carefully in a small amount of water, being particular to see that they do not burn. Any one of these vegetables may be cooked in this way, or two of

them may be mixed together, such as turnips and carrots or beets and parsnips. If mixed in this way they will make a very tasty dish, entirely different from anything to which you have been accustomed, and will really give the effect of a new vegetable.

In my estimation the most delicious way of preparing this class of non-starchy vegetable is by baking. One or more may be used, and they should first of all be ground fine and placed in a dry baking pan to a depth of one to two inches. This should be placed in a moderate oven and cooked for about ten minutes, or until done. An agreeable flavor is added to the dish if the cooking is continued until the top is browned. You will find that this method will develop still another flavor in the vegetables which is different from any you have been able to obtain by other methods of preparation. No seasoning of any kind should be used in any of the above ways of preparing, but butter and salt may be added as desired when being eaten. See also my remarks on these four vegetables in the chapter on Starches.

Pumpkin is a very wholesome non-starchy vegetable if cooked properly. Practically the only way in which it is used on the average table is in the form of pie, in which form it is overspiced and seasoned with sugar, and thus rendered unfit for food. It is best cooked in the same manner as squash, that is, cut into small pieces, boiled in plain water, and mashed if desired, while cream and butter may also be added. The small fresh pumpkin should be used whenever possible, as it contains less starch than the more mature kind, which is the grade commonly found in canned pumpkin. But even this canned variety makes a good non-starchy vegetable to take on a camping trip where there is a scarcity of greens.

Okra is a non-starchy vegetable used mostly through

the Southern states, where it is raised extensively. It makes an appetizing dish if cooked in plain water, and may be mixed with any of the other non-starchy vegetables when desired.

Oyster Plant or Salsify. This vegetable should be used as young as possible before the starch has had time to develop, as in this way it may be used more freely and has a more agreeable flavor. Do not scrape the oyster plant, but wash it with a vegetable brush and cook in plain water. If cut up thin and seasoned with cream and butter the flavor will slightly resemble that of an oyster stew, although the food value is undoubtedly different, as the oyster is a proteid food and often poisonous, while the vegetable oyster is non-starchy and always wholesome.

NOT SO GOOD

French Artichoke. The edible portion of this vegetable really contains about 14% of starch, but such a small amount is eaten at any time, and it makes such an enjoyable change, that I can recommend its use if not improperly seasoned. It should be cooked in plain hot water, and seasoned only with butter and salt. No mayonnaise or salad dressing of any kind should be employed.

Brussels Sprouts are a kind of cabbage, only the leaves are more tender, and if used at all they should be taken as a non-starchy vegetable. There does not seem to be as great a tendency to produce gas as in the case of cooked cabbage, and one can easily find with a little experimentation whether or not they can take care of the small amount of sulphur compound which this non-starchy vegetable contains, without producing stomach or intestinal gas.

Cauliflower is similar in composition to cabbage, and can usually be eaten raw, but is not so desirable when cooked. However, small amounts may be eaten by some people if they find that it agrees with them. It seems to be entirely a question of whether their system needs the sulphur element contained in the cauliflower in small quantities. It should certainly not be used by anyone who is seeking to avoid the formation of stomach or intestinal gases, as there are plenty of non-starchy vegetables about which there is no doubt.

Swiss Chard is another of the leafy non-starchy vegetables containing material which is slightly gas-forming, and should be used with caution in the cooked form.

Dandelion Greens contain a good deal of starch in their stems, but where it is impossible to obtain other vegetables they may be used and the starch avoided by eating only the tender green parts of the leaves, which only contain a very small amount of starch.

Kohlrabi and Rutabaga are also in that class of non-starchy vegetables which easily produce fermentation, and should be used with caution by those who are troubled with any extra-intestinal disorder.

Small Mushrooms are non-starchy, but as they grow larger they develop a good deal of starch. They do not contain many vitamins or organic salts, and should not be used unless one can enjoy them cooked in plain water and seasoned only with butter and salt. Mixed with grease, as commonly served as a dressing for meat, they are always indigestible, and only serve as a thickening for gravy which would not otherwise be used.

Small Fresh Sugar Peas contain so little starch that they may be easily classed as a non-starchy vegetable,

and may be used in that classification by anyone who is especially fond of them, or where better kinds of non-starchy vegetables are not obtainable. All legumes, such as peas, peanuts, and beans, contain a large percentage of both proteid and starch, and seem to be a bad combination in themselves, invariably producing flatulence. However, if the green peas are very young and small, a limited amount may be used without inducing any distress.

Sauerkraut is made of shredded raw cabbage, soaked in a salt brine, and is usually served after being cooked. Although raw cabbage may be used as a good salad food, much of its value is destroyed when prepared in this way because of the large amount of salt in which it is soaked. I cannot advise its use except in very limited quantities by those who experience no discomfort after eating it.

Watercress is a spicy non-starchy vegetable which may be used in the cooked form if added to such leafy vegetables as spinach, beet tops, etc., but is hardly palatable in the cooked form if used by itself.

NOT GOOD

Onions, Garlic, Leeks and Chives are non-starchy vegetables, but contain a large amount of allyl sulfid, which is always irritating to the mucous membranes and never fails to produce gas in the human digestive apparatus. There seems to be a lesser amount of this substance in these vegetables after they are cooked, but there still exists such a large quantity that I have never been able to find a place in the diet of a well person where they could be used, either in the raw or cooked state, without producing discomfort and gas pressure, and consequently I cannot at any time recommend them for food. Please

remember that this opinion was arrived at after much experimentation with both the sick and the well, and in spite of the recommendation of every dietetic authority with whose writings and advice I am familiar.

There are one or two writers whose opinions on dietetics I value very highly, but they still do not seem to have discovered that the onion eater cannot help being a walking gas factory. Out of thousands of patients who have consulted me I have not been able to find one who honestly thought that onions or garlic "agreed" with them.

The only practical use to the human that I have been able to find for the onion is to fry it in grease and apply as a poultice over irritated lungs. The irritation produced by the onions on the skin is sufficient to act as a counter-irritant in much the same way as a mustard plaster acts, but this irritating effect is not desirable inside of the stomach or intestines.

Cooked Cabbage is also a great gas producer, apparently due to some sulphur compounds which it carries in excessive quantities. Although raw cabbage can be used by most people, it seems that the cooking develops this sulphur compound in some manner, and there is no way that I know of preparing the cabbage by cooking where this gas-forming condition is not produced.

HOW COMBINATIONS WITH NON-STARCHY VEGETABLES SHOULD BE USED

The rule governing this is:—

"ONE OR MORE NON-STARCHY VEGETABLES MAY BE USED WITH ANY SINGLE ARTICLE OF FOOD; THAT IS, THERE IS NO FOOD MATERIAL WITH WHICH NON-STARCHY VEGETABLES DO NOT MIX."

The following sample menus will suggest different ways in which these may be used:—

1. Broiled beefsteak, cooked spinach, and salad of tomatoes and cucumbers.
2. Baked potato, asparagus tips, cooked cucumber, and raw celery.
3. Roast mutton, summer squash, beet tops, and raw cabbage.
4. Pint of raw milk, cooked spinach, sliced tomatoes.
5. 2 ozs. pecan nuts, small baked carrots, cooked carrot tops, baked apple.
6. Soup of potatoes and spinach, cooked oyster plant, sliced cucumbers.

(For more complete details, see chapter on Combinations.)

The use of most of the foregoing vegetables in connection with the making of salads will be found dealt with fully in the chapter on Uncooked Salad Vegetables.

CHAPTER V

SOUPS

A very valuable contribution to a meal may be made by the addition of some kind of soup. The same rules which govern the use of food combinations hold good in the case of soup also, and the inharmonious mixtures of foodstuffs usually made into soup will cause as much digestive trouble as if these same combinations were taken in a more solid form. If the combinations in soup are incorrect, such for instance as the use of macaroni and tomatoes together, or the addition of onions, you can expect as much or more trouble as if you took these together at one time as solid foods. So remember to apply the same rules in the preparation of a mixture of foods in soup as you would for the combinations at the ordinary meal.

Meat Soups should be made from the same kind of meat as is used at the meal, that is if any kind of beef is taken at the meal a soup may be made from beef meat combined with any of the other non-starchy vegetables which are used at the same meal. Probably the most delicious way to prepare beef soup is to use the ground Salisbury steak as described in the chapter under Proteids, and cook this ground round steak in sufficient water with a mixture of ground or chopped-up vegetables of the kind used at that meal. For instance, if celery and spinach are used as separate dishes at the meal they may be added to the soup, and if cooked for a long time with the meat will impart an agreeable flavor, without the addition of the usual thickening and starch generally employed in making soups. After cooking for at least an

hour the soup should be served, and then seasoned with butter and salt if desired.

Soup may be made from boiling chicken, rabbit, fish, or any of the other proteid foods, and combining them in the same way with the cooked non-starchy vegetables. It will be found that a better flavor is usually added if the vegetables are ground, and the soup made thicker by simply boiling out a good deal of the water. This soup will both look and taste different than any soup you have ever eaten, and by a little experimentation you will find that you can produce some very tasty and agreeable mixtures.

Starchy Soups. A delicious soup may be made by using any one of the good starches as listed on page 216 combined with any of the non-starchy vegetables; that is, a macaroni soup may be made by boiling macaroni with ground spinach, parsley, and celery, and cooking it a long time until the flavors of these foods are blended together. Potatoes may be cooked in the same way in place of macaroni, or rice, barley, or any of the other grains used. There are dozens of combinations which may be employed, but the rule must always be kept in mind that only one starch should be used, and that starch should be the same one as is used at the meal. In the same way the same non-starchy vegetables should be used in the soup as are used at the meal. Of course no meat is to be added to this soup, but it may be flavored with butter and salt after cooking if desired.

Non-Starchy Soup. It is often desirable to make a soup only of the non-starchy vegetables. This soup will fill up well, and in cold weather makes a light meal which is warming but does not contain much weight-producing food value. A combination of one or more of the non-

starchy vegetables may be used, such as carrots, spinach, parsley, celery, etc. These should be ground together and boiled for about an hour, afterwards seasoning with butter and salt. This soup may be taken exclusive of any other food for several days, and makes a very agreeable light partial fasting diet, which is satisfying to the patient, but will at the same time give the digestive organs considerable rest from their usual function.

CHAPTER VI

UNCOOKED SALAD VEGETABLES

It is believed by many scientists that man's body is a composite collection of all the elements in the universe. An element is defined as "a substance which cannot be separated into substances different from itself, at least by ordinary chemical processes." Nearly one hundred of these elements have so far been discovered either in the mineral, vegetable, or animal kingdoms, and almost all of them have been found in the human body. Of course there are only a few that are found in the body in any appreciable quantity, such for instance as calcium, iron, magnesium, silicon, and potash.

It is through food alone that the elements required by the vital forces in the building, maintaining, and repairing of our bodies are furnished. But food cannot impart more than it contains, and such a large proportion of the eatables commonly found on the modern table are so devitalized and improperly prepared that the most important organic minerals are either destroyed altogether or are entirely absent. Some of these elements are indispensable for the building of the bony structures of the body, and others again are needed for the repairing of nerve tissues and for the formation of the blood cells.

In the case of young children an abundance of these elements is required for the building up process before maturity is reached, and from that time on a sufficient supply must be kept up in order to furnish, in an organic form, such minerals as the body regularly needs. There is a never-ending cycle of change from the mineral kingdom up through the vegetable and on into the animal

kingdom, and then back again into the mineral. The minerals of the soil become the minerals of vegetables, and are then said to be "organic minerals." These organic minerals in the vegetables become the minerals of human or animal tissues, and on the disintegration of the body at death they return once more to the soil, there to provide food for vegetation once again. Foods which are uncooked and fresh from the soil contain the largest proportion of the vital elements, and cooking kills these elements at least partially; that is, changes them from a vegetable to a mineral form.

Chief among those who argue the necessity for man's return to a natural diet are the people who advocate the use of uncooked foods exclusively; but after man has lived for so many centuries on what has been at least a mixed diet, it is neither wise nor convenient to attempt to adopt such a sweeping change as to eliminate all cooked foods entirely. It seems that almost everyone who takes up the study of diet passes through the stage of believing that raw food is the only natural diet for man. It is no doubt true that primitive man lived on food in its raw state, but this was simply because of the fact that fire had not been discovered, and as soon as he learned how to prepare foods by heating, less and less of the uncooked material was used.

I believe that the development of the art of cookery has been of great value to the human race, and that man has developed a higher pitch of evolutionary efficiency because of it. As a rule cooked food is more digestible than raw food because the cellular structure is broken down by the heat, thus rendering it possible for the digestive juices to penetrate the food more easily. Actual experiments with the use of the X-ray in observing the digestion of food have shown that uncooked vegetables usually

are digested more slowly than the cooked foods, often taking twice as long in the digestive process. However, there is no objection to the mixture of uncooked and cooked foods at the same meal, and this generally seems the most desirable way to ensure a plentiful supply of the vital elements.

No method has ever been discovered whereby the organic tissue-building minerals can be separated from vegetable food and put in a bottle or into tablets, although many manufacturers put out remedies which they claim contain these blood-building vitamins and organic salts. If a salad of the succulent leafy vegetables is used each day by a person who has reached maturity he will find he is getting enough of the raw vegetables to keep up the supply of minerals in the body, in addition to that which is found in smaller quantities in cooked food.

The child's desire to eat raw vegetables seems to be a most natural one, and children should be encouraged to partake more plentifully of all uncooked foods than would be necessary for the adult. It is surprising how rapidly a child's health will improve after being placed on a diet containing plenty of salads and non-starchy vegetables, in place of the mushy, starchy food to which it has been accustomed. For the maintenance of perfect health these raw vegetable foods are indispensable at all times, instead of being recommended only in such obscure diseases as rickets, beri-beri, scrofula, etc., as is generally done.

The following is a list of those raw salad vegetables which can usually be found on the market. You will observe that I do not include fruits in this list, as they must be considered apart from vegetables in their combinations with other food.

GOOD	NOT SO GOOD	NOT GOOD
Celery	Brussels Sprouts	Onions
Spinach	Cauliflower	Garlic
Asparagus	Cabbage	Leeks
Cucumber	Watercress	Chives
Parsley	Swiss Chard	Radishes
Small Beets		Pickles
Small Carrots		
Small Parsnips		
Small Turnips		
Lettuce		
Oyster Plant		
Mallow		
Nasturtium Leaves & Flowers		
Endive		
Alligator Pear		
Ripe Olives		

GOOD

Celery is probably the best of all of the salad vegetables, containing a large amount of most of the organic minerals. Having so little starch it combines easily with all other food, is relished by nearly everyone, and never seems to disagree. It may be chopped up and added to a salad of other vegetables, but is so tasty by itself that I believe it should generally be served as the entire salad part of the meal. Salt should not be added to celery, and the practice of doing this is merely a habit which can easily be broken. Celery contains sufficient sodium chloride in an organic form in itself, and its delicious flavor is spoiled by the addition of the mineral sodium chloride or common table salt. This common table salt is always an inorganic mineral, and can never be used by the cell structure of the body, being simply an irritant in the stomach, and in the blood stream producing the same irritating effect as microscopic pieces of metal might.

The vegetable sodium chloride is needed in the body, and does become a part of the cell structure. It is often destroyed by cooking, and table salt is then added to the cooked food in order to furnish a substitute flavor for the flavor that has been cooked out, but this should never be done with uncooked foods.

Spinach is not commonly used as a salad food, but if it is washed carefully and served with the leaves cool and crisp it will be found to be a good substitute for lettuce, and most people who try it are usually sufficiently pleased with its flavor to employ it in place of the other most of the time. It contains a large amount of iron, and is the richest in this element of all the leafy vegetables. Those who have a deficiency of hemoglobin or red corpuscles in the blood should use a plentiful supply of raw spinach. It may either be used alone or combined with any other good food.

Asparagus is another tasty salad vegetable which may be used raw. Only the tender part should be eaten, as the ends of the large stalks will be found to be too tough for proper mastication. It may be used either by itself or with other vegetables, and has a flavor distinctly its own which you will learn to enjoy if you will only try adding it to your list of salad vegetables.

Cucumber has a bad reputation among the salad vegetables, but this is chiefly because of its customary bad companions. It is usually soaked in vinegar with onions, and the trouble almost invariably caused by these latter is blamed on the cucumber. Cucumber should be served plain without any seasoning, and prepared by peeling and slicing. Even the use of salt and oil should be avoided. Those who are having difficulty on account of gas formation will find that if cucumbers are used with an improperly balanced meal or when too much food

is eaten, that the cucumber will be tasted if gas is belched from the stomach. This is because during digestion the cucumber has a distinct flavor which can be more easily distinguished in the act of belching than the flavor of a dozen other foods in the stomach which are causing the fermentation.

I have found a large number of patients who have a fear about eating cucumbers, and it often takes a considerable time before this fear can be overcome. In spite of using perfect food combinations with the cucumbers they will always be looking for trouble, and this expectancy of mind undoubtedly helps to make trouble until they can demonstrate to their own satisfaction that cucumbers in themselves are harmless and really a valuable salad vegetable.

Parsley is a succulent vegetable, very rich in iron and potash. Because of its chemical composition it has a beneficial effect upon an inflamed urinary tract, tending to counteract some of the urine acidity when this is present in too large a percentage.

Parsley is best served with a salad of other vegetables, and the best way to prepare it is by grinding it through a vegetable grinder, using a large enough amount to make it at least one-half of the salad. It may then be mixed with or sprinkled over any other salad vegetable such as cucumbers, chopped celery, or ground carrots. It is as a general rule only used for garnishing a salad, but I urge you to use a large amount in the salad and you will find that it will make a very agreeable dish, and provide an interesting change from the ordinary run of salads.

Small Beets, Small Carrots, Small Turnips, Small Parsnips. If these vegetables are used as a salad, only the smallest should be selected. They should be prepared

by washing with a vegetable brush, but never under any circumstances should they be scraped, as this destroys the vital part just under the skin. They may then be used in their whole state, or may be ground through a vegetable grinder.

These four vegetables contain a larger percentage of starch than any of the other salad vegetables which I have listed, and it is wise to use only one of them at a meal, adding some other raw leafy vegetable such as lettuce, parsley, or spinach. This will keep down the total amount of starch, and will be found to agree with the patient who is not in possession of a strong digestion, whereas if more than one of these vegetables is used the amount of raw starch, which is so difficult to digest, will seriously retard the digestive process.

Lettuce is the most commonly used salad vegetable, but from several standpoints it is not the best. Lettuce contains a larger amount of water than any of the other salad vegetables, and less of the organic minerals. In order to supply enough of these minerals a large amount must be eaten at one time. Now lettuce contains a certain hypnotic agent called hyoscyamine, which has a deadening effect upon the nerves of the stomach if used in large quantities. If a large supply of lettuce is taken at any one meal the hypnotic effect of this chemical will manifest itself by a drowsiness that will become apparent shortly after the meal is eaten. Digestion will be retarded, and because of this the other food used will ferment more easily, and it may safely be said that those whose digestive powers are weakened in any way will be well advised to content themselves with very small amounts of lettuce.

However this ill effect does not appear to be at all pronounced if only a small quantity of lettuce is eaten

at any one time, and it may be used quite often as a garnish for the rest of the salad. I do not know of any other dietician who has brought out this point about lettuce, but I assure you that I have checked up sufficiently on the truth of it, so that if you are a "walking gas factory" you had better set a strict limit to your ration of lettuce.

Oyster Plant or Salsify is a good salad vegetable if used only when young and tender. It should be washed well, but not scraped, and may be served whole, sliced in thin slices or ground fine in a vegetable grinder. Since it contains a little more starch than the leafy vegetables it should not be used at the same meal as any of the other non-starchy tubers such as beets, carrots, parsnips, and turnips, because of the sum total of starch being too high.

Mallow (Dwarf) grows wild in the fields. It has a dark green leaf, and is slippery like okra when cooked. It is very rich in all the blood-building properties. I advise you to use it whenever you can find a place where it is growing. As far as I know it is never cultivated and sold in the market. It mixes well with any of the other non-starchy vegetables, and a particularly good combination is to add it to spinach either in the raw or cooked state.

Nasturtium Leaves and Flowers may be added to a salad and used as a garnish. Both the leaves and the flowers may be eaten, and they impart an agreeable flavor to any salad.

Endives are a very good leafy salad vegetable, and should be used in preference to lettuce as a succulent vegetable whenever it is possible to secure them.

Alligator Pears and Ripe Olives may be added to a salad or used by themselves for this purpose. They both

contain quite a large amount of vegetable oil, and should not be used in too great a quantity. It is best to use the alligator pear without any seasoning, simply slicing small pieces of it for a salad. Ripe olives are to be preferred to the green ones, and are rendered more wholesome if they are allowed to stand for several hours in cold water before being eaten, as this will extract some of the salt brine in which they are put up. Either of these salad vegetables will mix with any other article or combination of food.

NOT SO GOOD

Brussels Sprouts are a variety of cabbage, and may be used as a salad vegetable by certain people. Being of the cabbage family they contain a considerable amount of allyl sulfid, but if only small quantities are taken, combined with other salad vegetables, those with strong digestion will be able to handle them without producing any flatulence.

Cauliflower and Cabbage contain the same gaseous substance as Brussels Sprouts, but when they are used in a limited quantity in the raw state they can be taken by most people without any resultant discomfort. However, they are always questionable, and if you find that you have an excess amount of gas after eating them you had better discontinue their use, and wait for a considerable time before trying them again.

Swiss Chard is a kind of lettuce, but has some of the same properties as cabbage. Only small amounts should be used in combination with other salad vegetables.

Watercress is a spicy leafy salad vegetable which should only be used in combination with other vegetables and should never compose the entire salad as is so commonly done.

NOT GOOD

Onions, Garlic, Leeks, Chives, are commonly used as an additional seasoning to a salad, but in spite of the agreeable flavor which many people like, they produce more gastro-intestinal disturbance than any other class of food used on the modern table. The smallest amount of garlic rubbed on the side of the dish, as is sometimes done to flavor a salad, will produce flatulence in practically every case. I do not believe there is a place in the diet where these vegetables can be used either in the cooked or raw state without being productive of a great deal of harm.

Radishes must be tabooed by anyone who wishes to avoid the distress in the stomach and intestines caused by gas pressure. I do not know any way in which radishes can be taken where they do not produce this effect.

Pickles are made from different foods soaked in some sour preparation. The most common vegetable used is the cucumber, which is soaked in vinegar and flavored with other seasonings. They are altogether useless as a food, and if eaten at a meal where starch is used will invariably cause stomach trouble. If taken with a non-starchy meal no perceptible discomfort will be experienced by those in good health, but an extra secretion of gastric juice will be excited, and this as a rule is neither necessary nor desirable because of the fact that if continued it will cause hyper-acidity of the stomach.

HOW TO USE SALADS

The rule governing the use of salads is:—

“ONE OR MORE UNCOOKED SALAD VEGETABLES MAY BE USED WITH ANY OTHER SINGLE ARTICLE OF FOOD OR ADDED TO A MEAL WHERE THE OTHER FOOD COMBINATIONS ARE CORRECT.”

Tomatoes and pineapple are two fruits which may be added to a salad, if no starchy food is used at the meal.

The following are specimen meals embodying the salad rule:—

1. 2 ozs. of pecan nuts, and salad of cucumber and celery.
2. Baked potato, cooked spinach, salad of endives and asparagus
3. Broiled fish, salad of lettuce, tomatoes, and cucumber.
4. Soup made from macaroni and spinach, dish of boiled macaroni, salad of spinach, celery, and parsley.

(For more complete details see chapter on Combinations.)

The use of these vegetables in the cooked form, together with fuller particulars as to their food value and special virtues, will be found in the chapter on Cooked Non-Starchy Vegetables.

CHAPTER VII

FRUITS

Those who believe that man should live upon a natural diet often argue that fruits are the food provided by nature for him, but the truth of the matter is that most fruits growing in their natural state have usually a very poor flavor, are undeveloped, and quite frequently full of worms. All the fruits we are using today as food have been developed by cultivation, and it may be regarded as doubtful that primitive man lived on the unpalatable wild fruits for any stronger reason than that he was driven to do so by the sharp spur of necessity. As soon as he became sufficiently cunning he learned the trick of cultivating these wild fruits, berries, and herbs, so as to grow them to a larger size and make them more tasty.

The highly cultivated fruits we have today constitute a valuable addition to our food supply, provided a careful study is made of the different kinds with a view to understanding when and where they may be used to advantage. There is no magical property in fruit which makes it possible to use it indiscriminately with other foods; indeed the contrary is rather the case, so much so that the utmost care must be exercised in combining fruit with other foods, as it may quite easily become a dangerous article of diet if improperly used.

There is, however, undoubtedly a place in the everyday diet for fruit, and many special diets of fruit may be arranged for the patient to assist in the cure of specific diseases. The following tables and comments should be helpful to you if you will study them very carefully and endeavor to impress upon your memory the important

points dealt with in connection with the use of fruit as a food:—

ACID FRUITS

Apples
 Apricots
 Peaches
 Nectarines
 Pears
 Grapes
 Oranges
 Grapefruit
 Lemons
 Plums
 Loquats
 Cherries
 Berries
 Pineapple
 Tomatoes
 Melons

STEWED FRUITS

Prunes
 Figs
 Pears
 Raisins
 Apples
 Apricots
 Berries

ACID FRUITS

Apples in the raw state are a delicious fruit, which, however, is better taken by itself and should never be combined with starchy food. There is a considerable amount of carbohydrate material in the apple, and the combination in itself with its own acid seems to produce fermentation easily, so that quite frequently it cannot be used at all by people in whom this condition of fermentation sets up readily. If apples are used in place of a meal they may be combined with one or two ounces of nuts.

Fresh Apricots can only be secured in certain parts of the country, and are an excellent fruit for use in a fruit fast. They should be taken alone or with such proteid food as nuts, cheese, or milk. If they are used in this way, the skins may be eaten if well washed.

Peaches. Summer complaint, which is so common among children, occurs mostly during the peach season, and an almost specific cause seems to be the mixture of

peaches with starchy food. If the child is given peaches between meals when the stomach is still full of starchy food, it will have just as bad an effect as if the two had been eaten together. It is surprising how few cases of dysentery occur where the cause cannot be laid directly to this combination.

Nectarines are a variety of the common peach, but contain more acid, and do not have the same tendency to produce dysentery.

Fresh Pears have only a small amount of acid, and contain more sugar than any other element. They do not combine well with other food, but make a very agreeable meal by themselves.

Oranges, Grapefruit and Lemons supply a plentiful amount of citric acid, and in such a quantity that they should never be used with a regular meal. Contrary to popular opinion, these fruit juices combine well only with milk. They may be used just before milk is taken, or they may be mixed with milk, as explained in the chapter on milk. The juice of these three fruits may be mixed together, as they contain essentially the same elements, and the only acid contained in them is citric acid. No other fruits can be mixed together in this way.

In addition to the citric acid, grapefruit also contains organic quinine. A large proportion of this is in the skin, and may be extracted easily by the following method:—Cut a medium-sized grapefruit into small pieces, skin and all. After this has been done put it in an enameled pan or crock and pour over it one quart of boiling hot water. Allow to stand for at least 30 minutes. The juice from this may be taken during a fast, especially to stimulate the liver, and is particularly indicated in the treatment of all kinds of colds. The bitter taste arises from the organic quinine, which will have a quicker effect

than the inorganic form of quinine used in tablet form, without any of the bad consequences. It is also valuable in its action upon the liver and gall bladder in the elimination of gall stones, and those who have a tendency to any kind of liver complaint will be benefited if they occasionally leave out a meal and drink instead a quart of this juice made from the grapefruit.

Under no circumstances should grapefruit or orange juice or lemonade be taken preceding a meal or any closer than two hours before eating.

Plums are a strong acid fruit, and make an agreeable fruit lunch. Eat as many as desired in place of any other food, and drink a glass or two of water.

Loquats are a kind of acid fruit grown mostly in the southwest part of the United States. When ripe they have an agreeable flavor. A fruit meal may be made of them, with the addition of a glass or two of water. Special mention should be made of the bad habit of eating this kind of fruit between meals or near meal times, as it does not combine well with any other food. I have known very many cases of acute pain in the stomach and intestines from eating loquats fresh from the trees soon after partaking of a hearty meal. The opinion seems to prevail that fruit may be eaten at any time, but this is a great mistake, and there is probably no other class of food about which there is so much false teaching.

Cherries contain more iron and blood-building properties than any other fruit which can be found in the market. As with all of the other acid fruits they should be used by themselves, or in combination with sweet milk. There is a false belief that the combination of cherries and milk is particularly harmful, but a little experimentation will reveal the fact that this is not true, and that the combination seems to be perfect. Of course if bread or

any other starch is added fermentation will set up quickly as the acid of the cherries is very strong, and no kind of starch should at any time be mixed with this fruit whether the cherries be in the raw, canned, or cooked state.

When the child comes home from school after stopping off on the way and eating cherries or green apples, and is then given bread and butter and milk by his mother, you may expect intense stomach cramps, as such a combination of foodstuffs is probably the very worst that could be put together. The trouble, however, is caused entirely by the fact that bread has been added to what would otherwise have been a perfect combination. The acid of the cherries seems to assist in the digestion of the milk, so that the cherries and milk together are digested more rapidly than if the sweet milk were used alone.

Berries, although not truly considered a fruit, are put in this class in order to simplify classification, as they should always be used in the same way as acid fruits. If the berries are well ripened they can often be used as the dessert at a meal which does not contain starch, but no sugar should be added. Cream may be used if desired. During the season a very palatable lunch may be had by using a pint of raw milk and as many berries as desired of any one kind.

Pineapple is an acid fruit, but may be used as an addition to a salad if no starchy foods are used at the meal. It really contains a good deal of acid, but this particular kind of acid does not seem to cause any trouble. It may also be used as a dessert, although if the canned variety is taken it is better to wash off the syrup in which it is put up.

Tomatoes are an acid fruit, but one which can be used

with a non-starchy meal. The malic acid of the tomato seems to assist especially in the digestion of fish, when fish and tomatoes are taken at the same meal. However, this acid seems too strong for some people who are bothered with flatulence, and in such cases should be withheld until digestion becomes normal.

Melons contain a small amount of acid and a considerable amount of sugar and starch. They do not combine very well with other food, and should be used as a fruit, although they invariably produce a good deal of stomach and intestinal gas. Undoubtedly the best way to use melons is to make a complete meal of one kind of melon, eating all desired. They should never be eaten when they are unripe, at the beginning of the season.

STEWED FRUITS

Prunes, Figs, Raisins, and Apricots are wholesome foods if prepared properly. In their dried form they should be well washed and soaked overnight in enough water to cover them. They should then be cooked slowly in the same water for as long as possible, in order to bring out the sweet palatable flavor. No sugar should be added, as the slow cooking will bring out the fruit sugar, which will make them taste more delicious than if commercial white sugar is used.

If you can possibly obtain the particular kind of dried fruit which has not been prepared by sulphur, you will find it a great deal more desirable in every way. The ordinary dried fruits are treated with sulphur in order to kill all the small forms of bacterial and worm life, but some of the sulphur elements are generally left in the food, and I find this tends to cause flatulence in the same way as it is caused by the sulphur in onions and garlic. This unsulphured, sun-dried fruit is hard to obtain in the ordinary grocery store, and in case you should be unable

to get it I will be glad to give you the names and addresses of firms who will supply you by parcel post.

If a few senna leaves are added to any of these dried fruits before they are soaked overnight, and the leaves left in while cooking, you will find it will have a very mild effect upon the bowels and will assist in overcoming constipation. Of course as many leaves may be added as seem necessary, but usually a very few will be sufficient. I make this suggestion only because I believe that if a laxative of some kind must be used this will be the least harmful form, but it should not be continued any longer than is absolutely necessary.

Berries should always be washed in several waters, in order to remove any poison which has been sprinkled on the fruit while growing to keep away insects. They should then be stewed for a long time in the same way as the stewed fruits last referred to. They must only be eaten with a meal that does not contain strictly starchy food.

Pears and Apples when used with a proteid meal should be stewed or baked. No sugar should be added, but it will oftentimes be necessary to stew apples for two or three hours on a slow fire, in order to bring out the natural sweetness. On account of the considerable amount of carbohydrate which these foods contain, an especially bad mixture is made by the addition of any commercial sugar.

FRUIT RULE

The rule governing the use of acid or stewed fruits is:

“ONE ACID OR STEWED FRUIT MAY BE USED AS A MEAL BY ITSELF, OR IN COMBINATION WITH EITHER MILK, CHEESE, NUTS, OR ONE KIND OF PROTEID, AND COOKED NON-STARCHY AND SALAD VEGETABLES MAY ALSO BE ADDED IF DESIRED.”

CAUTION—“NEITHER ACID NOR STEWED FRUIT SHOULD EVER BE USED WITH STARCHY FOODS.”

CHAPTER VIII

DESSERTS

One of the most harmful dishes found on the average table today is some kind of tasty, sweet food, served at the end of the meal and called "dessert." This is usually a palatable, pleasing mixture which one can eat easily even after a hearty meal on account of the agreeable flavor.

Puddings are always made from some combination of sugar and starch, and this combination is one of the worst from the standpoint of physiological chemistry, because fermentation will always take place. In addition to the sugar being added to the starch, some kind of fruit or fruit juice is often thrown in which makes the combination even worse.

Ice Cream is generally made with about the same mixture as puddings, namely eggs, cream, corn-starch, sugar, and usually some fruit flavoring. If made in this way it is certainly not a wholesome food. However, it may be made at home from a combination of pure cream and eggs, with the addition of only a small amount of sugar. A small dish of this dessert may be used by the average person occasionally without fear of harm, but there is always a tendency to chill the stomach and retard digestion unless the ice cream is eaten very slowly.

Stewed Fruits make an excellent dessert, if one is desired, but you must see to it that this is not added to a meal which has already made you feel full. The addition of this kind of dessert should not be made if it causes you to feel stuffy, as it will set up digestive disturbance no matter how perfect its combination may be with the other food.

Fruit Whip may be made from either prunes, figs,

apples, pineapple, pears, apricots, or berries, by mincing or grating up any of these fruits and adding them to the white of an egg which has been well beaten. They should be beaten in thoroughly with the white of the egg, and it is not necessary to add any other seasoning. Prune whip is about the only kind that is commonly used, but it is altogether spoiled from a dietetic standpoint by the addition of an extra amount of sugar, which is not only unnecessary but actually produces an almost sickening flavor. You will find that any of these fruits may be prepared in the same way as the prunes, without the addition of any sugar. They may be served with a small amount of cream if desired.

Gelatin is put up in dried form and sold in packages under various trade names. It may be prepared without sugar and added to a salad, or one kind of fruit may be mixed with it and served as a dessert. "Jello" is a mixture of gelatin with imitation fruit flavoring, and is one of the most convenient ways in which to use gelatin, the addition of the artificial flavoring not appearing to be harmful. It is usually prepared with a larger amount of sugar than is necessary, and you will find it will have a very agreeable flavor if only a small amount is used. Either gelatin or jello may be served with thick cream or with whipped cream.

Gelatin is a very useful substance in the body, and it is the lack of this substance that makes the bones harden, rather than the addition of minerals. It seems that a plentiful supply of this food in the diet really keeps the bones and tissues softer and younger than when none is used. If there is a large supply of gelatin in the blood, coagulation will set up readily, and it is especially indicated in all cases where there is a tendency to bleed easily. It is almost a specific for profuse menstruation and

the persistent bleeding at menopause, providing this bleeding is not produced by tumors or cancers. If the patient will use gelatin three times daily for two or three days before teeth are extracted there will be very little bleeding, as the blood will coagulate easily.

Unless too much sugar is used with the gelatin or jello it is hardly possible to eat too much of it, and I strongly urge that it be used several times a week, either as an addition to the salad or in the form of dessert.

Custards may be used as a dessert if made properly, or they can be used as the main part of a proteid meal. Although it is not ordinarily advisable to mix two kinds of proteids together, if eggs and milk are properly mixed before cooking the proteid elements in the two seem to combine freely. I do not find this to be the case when they are used uncooked. No corn-starch or sugar should be added to this custard, but a few raisins may be used if desired, in order to impart a slightly sweet flavor. In place of the raisins a small amount of lemon juice can be added, and beaten up vigorously with the egg and milk. The custard should be cooked in a slow oven, otherwise the egg and milk will separate, but it is well to have the dish warm in which the custard is cooked before it is put into the oven, so that the cooking will start more quickly. If the egg and milk separate before the cooking is completed the custard may be taken out of the oven and beaten up again. It might even be necessary to do this two or three times during the cooking, in order to cook thoroughly through.

DESSERT RULE

The rule governing the use of desserts is as follows:—

“ANY OF THESE GOOD DESSERTS MAY BE USED IN COMBINATION WITH ANY NON-STARCHY OR SALAD VEGETABLES OR IN ADDITION TO A PROTEID MEAL, BUT SHOULD NEVER BE USED WITH STARCHY FOOD.”

CHAPTER IX

MILK

Milk is one of the foods which man has been able to develop through the proper care of cattle, so that cows and nanny goats have been trained to give milk for a long period instead of for the short time necessary for the nourishing of their offspring. Although the milk of any animal is only ideal food for the young of that particular animal, nevertheless I believe that cow's milk is one of the most valuable foods which man can use at the present day, provided he will learn to understand its proper place in the diet.

Milk is a liquid food and must be as completely masticated as if it were solid food, that is to say it must be moved around in the mouth so that it may be thoroughly mixed with saliva. This is not done as a general rule, and the milk consequently forms into large curds in the stomach because of being swallowed in large mouthfuls, and the digestive juices of the stomach are unable to penetrate these curds and extract from them the necessary nourishment.

Raw unpasteurized milk contains practically all of the elements necessary for the body's nutrition, but when it is added to an ordinary meal and mixed with other nourishing foods, the stomach will be unable to take care of such a quantity of material which is at the same time difficult of digestion. Milk is not digested easily, as many people believe, but takes about the same length of time in the digestive process as any other good proteid such as lean beef, mutton, etc. If it is mixed with any of these other proteids, digestion will be delayed in the stomach, and will take about twice as long as when the milk is used by itself.

Milk should therefore be used only by itself, or in combination with some one of the fruits. Digestion takes place more easily if fruit is taken with milk than if the latter alone is used, as milk in this combination seems to gather in smaller curds which the digestive juices can penetrate more easily.

Pasteurized Milk does not have as great a food value as milk in the raw state on account of its being heated to such a degree that the organic salts and vitamins are precipitated and changed into minerals which the body cannot use. This pasteurizing process kills some of the bacteria which sour the milk, and this is probably the reason why dairymen pasteurize milk, since in this condition it will keep for a longer time without souring.

In some States the laws regulating the distribution of milk compel the pasteurizing of all milk taken from cows which have not been tested for disease. Raw milk can only then be sold from cows which have passed the necessary health tests. No disease germs are killed by the pasteurizing process, and if the milk is from unhealthy cows no amount of heat would make it fit for food—not even if it were boiled.

Raw milk from healthy cows is in such demand that at the present time in Los Angeles a quart of it sells for 28 cents, and even at that figure your order has to take its place on a waiting list. An unlimited amount of pasteurized milk may be secured at 15 cents a quart, so it can be readily understood that if the dairyman has cows which are healthy enough to pass the tubercular and other tests, he will sell the milk as raw milk and receive the extra profit.

Unhealthy milk from sick cows cannot be made fit for food by any kind of sterilizing process, any more than could the contents of a garbage can, so when I advise the

use of milk you must remember that it should always be healthy milk taken from healthy cows, and of course as fresh as possible.

The Milk Diet has been adopted to a large extent by those who are searching for more abundant health, and in certain cases it is productive of very beneficial results. Anyone suffering from any form of gastro-intestinal disorder will usually find that a few days on a milk diet will assist the stomach and intestines in regaining their normal tone, and the rest from other foods is undoubtedly of some benefit. The milk may be taken in place of meals, using as much as a quart at one time, but the best way in which to take an exclusive milk diet is to drink small quantities of milk at frequent intervals. For instance, a very good method is to take an 8-oz. glass of milk every hour for twelve hours, so that three quarts in all are taken in a day.

It is important to be regular in the time for taking milk, as the stomach and intestines seem to be able to handle it more easily if this regularity is practised. It is in addition usually advisable to add some fruit or fruit juices to this diet, and a very desirable way is to take one or more teaspoonfuls of lemon juice just before each glass of milk is taken. This seems to assist in the digestion of the milk, and tends to prevent biliousness. Orange juice or grapefruit juice may be substituted for the lemon juice, or any of the acid fruits may be used to advantage. I find that almost everyone can take the milk diet if some kind of fruit is used, whereas there are a great many who cannot take a large enough quantity of milk itself to sustain them without producing biliousness, probably from the amount of fat which the milk contains. The fruit juices appear to help in emulsifying this fat and making it more easily digested. A very good way in which to

use milk is to take it in place of a meal, drinking a glass every fifteen minutes until one quart is taken, and eating along with it some of the fruits suggested above.

Lemon Milk is a kind of sour milk or substitute for buttermilk, made by adding the juice from one-half to one or even two lemons to a pint of milk, and shaking the lemon juice and milk together vigorously. An egg-beater may be used in beating the mixture up, but the simplest way to prepare this lemon milk at home is probably to put the pint of milk in a quart bottle and then add the strained lemon juice in any quantity desired to suit the taste. Put the cap on the milk bottle and shake vigorously, churning it up and down to mix the milk and lemon together. This mixture tastes different than any other sour milk that you have ever used, and is relished by almost everyone. Patients who are so weak that they cannot digest any other food will always be able to digest this lemon milk if they can eat anything at all. You may take a pint or more of the mixture for a meal, or a glass per hour may be taken in the same way as in the sweet milk diet, but it must be mixed fresh each time you use it, as the curd and whey will separate after a time if not taken when prepared.

Sumik may be made by using milk which has been allowed to stand in a cool place for a week or ten days. The bottle, which has been kept covered, should then be opened and about one-half of the whey removed. The rest of the milk can then be shaken in the bottle, or poured out in a pan and beaten with an egg beater. This is equal in value to the lemon milk, but is not so easily prepared on account of the length of time the milk takes to sour by its own lactic acid. If the milk is soured more quickly by heat the flavor is entirely different, and it does

not taste nearly so good as if soured for a long time in a cool place.

Buttermilk as secured from the dairyman is usually only soured skim milk, and is generally taken from pasteurized milk which has had the cream removed for butter. Because of its liability to have been taken from sick cows I do not advise its use when the lemon milk or sumik made from raw milk is so easily obtainable.

Bulgarian Milk. This kind of sour milk is made more quickly by adding to sweet milk a culture of Bulgarian bacillus, which assists in the souring process and in developing the lactic acid. If it is added to raw milk it is no doubt better than ordinary buttermilk, but it cannot be compared in value to lemon milk or sumik.

Goat's Milk may be used in place of cow's in any way except for the milk diet. When an attempt is made to take enough goat's milk for an exclusive diet, you will find that after drinking one or two quarts a slightly unpleasant taste will gradually make itself apparent, which is not perceptible when only a small quantity is used. Goats are naturally healthy animals and their milk is very clean, so if it is enjoyed and can be secured fresh you will find that it makes a good substitute for cow's milk.

CHAPTER X

TOASTED FOOD

When any kind of starch is heated sufficiently to turn brown, it has then been changed into dextrose, in which form it is readily assimilated. When the starch itself is eaten it must be converted by the digestive juices into a form similar to this dextrose, after which assimilation takes place. It is not possible for starch to be assimilated until it is thus converted, so that browning the starch by toasting saves the digestive organs so much work, and prepares the food for immediate assimilation, which assimilation no doubt begins as soon as the food enters the stomach and continues through the intestines.

Although starch ferments very easily, after the same food has been dextrinized there is no possibility of fermentation existing, and it can never cause indigestion, because it is already digested and ready for assimilation. Those who are inclined to constipation must be cautious in the use of this class of food, as indeed they should be with all concentrated foodstuffs, because so much is assimilated, and very little bulk material left behind to form bowel movements. However, if sufficient bulk is used at the same time, dextrinized foods themselves will not produce constipation, but care must be exercised by those with sluggish intestines until the bowel movements become normal.

Any dextrinized food mixes well with any other article of diet, and is especially recommended for those who are doing hard muscular work or who, in addition to brain work, are taking vigorous physical culture exercise. The following are some of the more important toasted foods:—

Melba Toast is the name given to a certain kind of toasted bread by some of the larger hotels, and is distinguished from the ordinary toast by being very thin and browned all the way through. It may be made at home very easily by using the following method: cut all of the crust from an ordinary loaf of white bread, and slice the entire loaf in pieces one-quarter of an inch thick. Allow these to dry at least overnight, and preferably even longer. When thoroughly dry they should then be put in a moderately hot oven and roasted so that the heat will entirely penetrate the dried bread and it will be browned all the way through.

If the crust is left on the bread you will find that it (the crust) will tend to burn, while the rest of the toast will not be browned well enough. The cooking must be continued until there is no sign of any white starch in the toast. The best way to do is to toast an ovenful at a time and not attempt to do anything else while you are watching the toast. Sit in front of the oven and open the door every minute or two, so that there will be no chance of the toast either being burned or not browned completely.

When toasted in this way the bread will have a sweet taste similar to what used to be sold in the stores under the name of "Zwieback." It was possible at one time to buy this imported zwieback in packages, and it was simply made from plain bread and toasted in the same manner as I have described for the Melba toast, but as far as I have been able to ascertain, all of the zwieback that is now sold on the market is made from sweetened bread and only partially toasted, and is in no way similar to Melba toast, being really as harmful as white bread because of the untoasted starch which is mixed with sugar.

There is no advantage in eating the ordinary toast which is served in restaurants over eating any other kind

of bread, and it really appears as though more digestive disturbance is caused by eating this ordinary toast than if plain bread is used. Melba toast may be taken with any other food, and several pieces may be eaten at a meal. It should be buttered fresh as it is being eaten, and the butter should not be allowed to melt on the toast. If the butter does melt on the toast it seems to have some effect upon the other foods which are eaten with it, and digestion is delayed. It may not seem reasonable to believe that it would make any difference whether the butter melted or not, but I have found by actual experience with patients that it does make a great deal of difference.

Shredded Wheat Toast is best made by breaking open a shredded wheat biscuit and retoastng the inside by placing it under a broiler fire, far enough away from the fire to make certain that it will not burn too much. Because this wheat biscuit is shredded the heat from the broiler will penetrate it easily and toast it through quickly, a thing that cannot be done with ordinary bread. The shredded wheat may also be cooked in the oven in the same way as bread toast, but I believe the cooking under the broiler is to be preferred, as the outside of the shredded wheat biscuit is already partially toasted, and when placed under the broiler the inside may be cooked more than the outside, which ensures a complete toasting all the way through. This can be served with the addition of boiling hot water poured over it, and eaten with a seasoning of fresh butter. No sugar should be added.

Triscuit is of the same composition as shredded wheat biscuit, and is simply pressed flat. It should be toasted in the oven in the same way as the Melba toast, and makes a very delicious toast. Packages of this triscuit may be taken on travels and camping trips, and retoastng just before being used. It has a different flavor than Melba

toast on account of being made from shredded whole wheat, and will be relished by those who do not care particularly for the latter.

Kellogg's Toasted Wheat Biscuit is similar to Triscuit but is more dextrinized when purchased. However, it should be retooasted in the oven, and may then be used in place of any other toast.

Other Toasts may be made from whole-wheat bread, Graham bread, muffins, or even corn bread. The only rule to remember is that all of the starch must be converted into brown dextrose. There is no particular advantage in using any of these breads for toast except that the flavor is somewhat different and might be relished more by some than that of white bread toast. All of the other food elements are destroyed in toasting and only the dextrose is left behind, so there is actually more dextrose in the white bread toast than in the others. Whole-wheat bread does not toast as easily as the white bread, but if sufficient care is exercised in browning it entirely through it makes a delicious toast, although very hard to chew.

Toasted Nuts. If nuts are shelled and roasted in a pan in the oven they may be dextrinized thoroughly and will develop a rich brown color. By this process most of the proteid is destroyed, leaving behind a flavoring mixed with the dextrose which is very agreeable to the taste, and a small dish of this food may be used with almost any meal to which toast could be added.

Peanuts are so high in starch value that they make an excellent nut for roasting. For convenience you can buy the ordinary roasted peanuts, shell them, and retooast in the oven in a pan. This retooasting takes only a few minutes, and they may be served hot, with the addition of a little butter if desired. These roasted nuts make a pleas-

ant addition to the meal, and may be taken freely by almost anyone who is not suffering from constipation. If chestnuts are used they should be browned first and broken in halves and then toasted in the pan in the oven. Pecan or almond nuts may be used in the same way as peanuts, but care must be exercised to see that they are toasted completely.

Roasted Nut Butter may be used in those cases where toast could be used. This does not mean the ordinary mixed nut butters on the market, which are light in color because the nuts have not been roasted. Only roasted nuts should be used, as this is dextrinized food, while the nut butters light in color are made from nuts containing a large amount of raw starch. A small portion of nut butter may be served on the plate with the dinner with almost any kind of a meal.

Corn Flakes are a kind of dextrinized breakfast food which may be used as a toast if retooasted slightly in the oven and served with cream, or by moistening with hot water and flavoring with butter.

Uncle Sam's Breakfast Food is a kind of breakfast food which has been on the market for a number of years and consists of a mixture of toasted wheat flakes made from whole wheat mixed with flaxseed. This should be used in the same way as the corn flakes, but is more desirable because of the small amount of flaxseed it contains, which helps to overcome constipation and counteracts the constipating effect which is present with all dextrinized foods.

CHAPTER XI

LIQUIDS

Water should be the principal liquid used, but the regulations governing the taking of it must be left to each individual person. When large amounts of non-starchy and salad vegetables form part of the diet there will be such a quantity of water supplied by these foodstuffs themselves that it will not be necessary to take a very large amount for drinking purposes.

When hard muscular exercise is being indulged in there will be an increased demand for water, as the body is constantly eliminating moisture in liquid and gaseous forms at such periods. This elimination is actually going on at all times, but it is increased when it is necessary for the body to regulate its temperature or to throw out toxins which have been dissolved in the body liquids.

There are many who advocate the drinking of water with meals, and just as many who consider that it is injurious. I believe that both opinions are correct according to the individual case. There is no rule I know of that can be laid down to apply to everyone, but a great deal of experimentation must be conducted in order that each one may ascertain just what proportion of water should be used in the diet, either with meals or between meals, to get the best results.

In general if the urine is quite clear it will indicate that the body has enough water for its needs, but if you find that it (the urine) becomes heavy at certain times it is well to see that an extra amount is added some time previous to such periods, that is to say if you find that each day the urine is cloudy at eleven or twelve o'clock in the forenoon, it would be a good plan to drink one or

two glasses of water about ten o'clock. The same person will generally find it advantageous to take one or two glasses of water again an hour or so before dinner.

If water is taken just before retiring it will be necessary to get up once or twice during the night for the purpose of emptying the bladder, and this often disturbs the patient's sleep and prevents the deriving of the fullest amount of good from the night's rest. If your urine is very heavy in the morning it would be better to adopt the habit of getting up about 4 or 5 a. m. and drinking one or two glasses of water at that time, so that the body may have this water to use for the purpose of cleansing the kidneys and bladder from the material which has accumulated during the night.

If there is an insistent craving for large amounts of water in the daytime it is usually because too much seasoning is taken in the food, particularly of salt. If you are eating food prepared as I have suggested in this book, and you still have a desire to drink water a good many times during the day, it would be well for you to have your urine examined to see that it does not contain sugar in excess, which would indicate that you were suffering from diabetes.

Try drinking half a glass to a glass of hot water after each meal in place of coffee or tea. Do this for a few days, and then try a few days without taking any water at meal times at all. In this way you will be able to ascertain which procedure seems to agree best with you, and whether digestion is improved or retarded by one or the other method.

It is generally possible to drink water between meals in large quantities without injuring the body, but this should not be done merely as a matter of policy unless you have clear evidence that you are deriving benefit of

some kind. My own belief is that constipation is frequently caused by taking large amounts of liquids, as these are washed down into the intestines and supply for a time the medium which takes the place of the intestinal juices. These intestinal juices, however, have a better lubricating effect than water, if left in a natural state, but their strength seems gradually to diminish if large quantities of water are used. If the food is allowed to digest in the stomach and intestines without too much liquid being added, there will be more digestive juices formed and more of the normal lubricating fluids will be generated, but this generation seems to be discouraged if too many liquids are taken.

Coffee and Tea, which are so commonly used, cannot be classed as good beverages, and should not be taken with any regularity. An occasional cup of tea without sugar or cream, or a small cup of black coffee without sugar or cream, may be allowable on special occasions, but their use should not be made a habit. There are many authorities who condemn tea and coffee as very dangerous drinks, and they are often spoken of as the cause of different diseases. There are others again who freely recommend their use, claiming that the drugs contained in them are not harmful.

After a close study of the subject with many classes of patients and those in good health, my conclusion is that more harm than good will come from their use, and I cannot conscientiously recommend them. However, it does not seem to me that the drugs in tea and coffee are so harmful, but rather that the kidneys and liver seem to be overworked when they are taken. If coffee is drunk at breakfast you will find the urine very heavy in the middle of the morning, and if you test yourself carefully you will discover that your mental and physical powers

will not be as acute as if hot water were used in place of the coffee. If you are striving for 100% efficiency these drinks must be eliminated.

Milk is about the only liquid food I ever advise, and it may be used in either the sweet or the sour state as explained in the chapter on this subject. You must remember that milk should never be taken at the ordinary meal. This was recognized many centuries ago when the Mosaic laws were written, yet I know a good many people at the present day, even including dieticians, who do not understand that to drink milk when eating either meat or fish is to form one of the most incompatible of food mixtures.

Cocoa and Chocolate were for a long time considered a good food for convalescents and were generally given to patients in the hospitals. Many institutions for the care of the sick, however, have now abandoned the use of these beverages, finding that they cause more trouble than either coffee or tea. They seem to produce a good deal of biliousness, and of course are unpalatable unless a large amount of sugar is used. Chocolate is simply cocoa to which sugar has been added. I never recommend either of these at any time as a food.

Malted Milk is a stimulating food beverage, and if it is used at all it should be taken in place of a meal, and then only mixed with milk or water. The mixtures with malted milk put up at the soda fountains are really unwholesome concoctions. Malted milk is entirely devitalized, and only contains stimulating elements of a carbohydrate nature. Probably because of the fact that it is a liquid carbohydrate it does not digest easily, since no one mixes it sufficiently with saliva, and there is no doubt that the common practice of taking a hurry-up lunch at the corner soda fountain consisting of malted milk and

sandwiches should be regarded as one of the very worst dietetic errors.

Light Wines, such as claret, sauterne, and sherry, may be used with a proteid meal, but should not be taken when starch is eaten. There are undoubtedly some people with weak digestive functions who will be able to get more good from their food if a glassful of wine is taken just before the meal. If it is impossible to secure good wine and you can obtain whiskey or brandy, a small amount of either of these may be used if well diluted with water, just before the meal. This is particularly desirable at the evening meal, and especially with those who have had an exhausting day of hard mental work. At such a time the stimulant seems to act as a food, and quickly renews the energy which has been used up during the day.

If excesses with any kind of alcoholic beverage are indulged in, intoxication will be produced, accompanied by a marked impairment of the physical and mental functions, but in spite of this fact there is undoubtedly a place in the diet for certain small amounts of well-made wines or liquors.

Beer was never a very wholesome drink, seeming to cause a good deal of flatulence. Only a small quantity should be taken with the meal, and it is really much better to drink it between meals when no other food is in the stomach.

Lemonade, Orangeade, Limeade, etc., may be used if they are taken without any other food in place of a meal. It is not even the best policy to take these drinks between meals, but rather to substitute them for a meal such as lunch, or any of the other meals during hot weather or when you are not very hungry. A most agreeable flavor can be produced if honey or maple syrup is used in place of the ordinary sugar.

Carbonated Drinks of all kinds are not to be recommended because of the effect in the stomach and intestines of the generation of gas from the carbonated water. In addition they are usually sweetened with glucose and flavored with various imitations of fruit flavors, which makes it necessary to use them in place of a meal if they are taken at all, and not in addition to any other food.

Coca Cola is a drink made by adding carbonated water to coca cola extract, which contains mostly burnt sugar and caffeine, the principal drug found in coffee. If this is used far enough away from meal times it is stimulating, but apparently not harmful. Coffee has much less caffeine in it than coca cola, yet seems to work much more mischief than the latter. Coca cola has been largely condemned by dieticians and health authorities, but I personally have never been able to find a patient who has been harmed by it provided it was taken only occasionally and not near meal times.

Grape Juice is a drink which may be used any place in the diet where grapes themselves could be taken. (See chapter on Fruits.) The kind which is prepared from the pure juice of the grape, which has only been heated sufficiently to pasteurize it so that it can be bottled without spoiling, is much to be preferred. Most of the grape juice on the market is made from poor grapes which are boiled and to which sugar is added. This kind of grape juice is not so wholesome as that prepared by pasteurizing only, and in addition has a constipating effect, while the other is laxative and nourishing, but of course neither of these is ever so desirable as the fresh juice of the grape which has not been heated in any way. Grape juice is a refreshing and nourishing drink if taken in place of a meal, but the same caution must be observed as governs the use of fruits.

CHAPTER XII

SUGAR

Sugar is a form of carbohydrate food which is used liberally on the average table, but the way in which it is taken generally does more harm than good. If it were entirely eliminated from the diet we would not be nearly so likely to suffer from the lack of those elements not contained in sugar which have to be derived from other foods, but which we are apt to go short on because these particular foods are crowded out of the diet to make way for the palatable sugar. It is used a great deal for flavoring starchy dishes, and this combination with starch can always be relied on to produce excessive fermentation.

It is this combination of sugar and starch which is so commonly used in the manufacture of alcoholic beverages, some liquors being made entirely by fermenting grains and sugar together. If such combinations are used in the human digestive apparatus precisely the same kind of fermentation will take place, although of course to nothing like the same extent as if allowed to continue for a week or two. Sufficient fermentation however actually does take place to produce a large amount of stomach and intestinal gas, and at the same time certain toxic substances are generated in the production of the alcohol which results from this fermentation.

You are perhaps familiar with the processes by which fusel-oil and other poisonous substances are distilled from liquors, and at this particular time when so much illicit distilling is going on you doubtless know of many cases of sickness and even of blindness and paralysis brought on by drinking these distilled liquors that have

not been properly treated for the removal of these poisonous properties. Similar poisons are manufactured in the alimentary canal when too much starch is eaten or when sugar and starch are mixed together at the same time. It is surprising to see how certain chronic ailments will disappear when the patient stops using such combinations as are to be found in breakfast cereals flavored with sugar, puddings made with starch and sugar, and even by eliminating from the starchy meal drinks which have been flavored with sugar.

Almost any kind of sugar may be used in place of starch if the rules laid down for starches are followed. Most people however would not be satisfied with a meal of this kind, yet there are some agreeable ways in which the better sugars may be taken. The sugar fruits for example may be used in place of starch, or may be eaten in addition to a proteid meal. If one is very fond of stewed prunes, figs, raisins, or any of these sugar fruits, a pleasant change may be made from the ordinary starchy meal by substituting any one of these fruits for the starch. As however the nourishment contained in the stewed fruits is so concentrated, it is always advisable to use a certain amount of non-starchy or salad vegetables at the same time.

Another way in which they may be combined is with sweet milk or buttermilk. If honey or maple syrup is ever used it should be taken as previously suggested in connection with the making of lemonade, or can be used in flavoring toast or waffles which are dextrinized. These sugars should not be used with bread or muffins, although those with strong digestive ability will find they are able to eat stewed fruits that are rich in sugar with muffins or mush made from whole-wheat flour. This is a matter that must be tried out in each individual case, but as a

rule it will be found that the whole-wheat muffins and stewed fruit will not ferment as easily as other combinations of starches and sugars. This is not true of the ordinary whole-wheat flour, but can only be applied to the flour made from the entire grain. I believe the reason that less fermentation takes place with these foods is that they seem to pass through the alimentary canal more quickly and do not delay in any one place long enough for fermentation to be developed. Most of the starches pass through very sluggishly and ferment more readily.

CANDY is not the best kind of sugar to use, and cannot be considered to have the same wholesomeness as the sugar fruits. The vitamins are entirely destroyed in the sugar used in the making of candy, but these are retained in the fruit, which preserves the sugar in more of its natural form. If candy is taken at all it should be used in place of starchy food, and sufficient bulk of non-starchy or salad vegetables taken with it, or a small amount used at the end of a proteid meal. It is however rather a dangerous food for anyone to use who is trying to keep in perfect health, and whose case demands that they should live on a small amount of carbohydrates. If children are given enough of the sugar fruits to eat in place of candy they will generally be more satisfied and will not think of asking for the latter.

CHAPTER XIII

FOOD COMBINATIONS

When the average person plans a meal the idea which seems to be uppermost in his or her mind is to prepare as many tasty dishes as possible, and often those who pride themselves on their culinary art delight in serving concoctions which are distinguished by "queerness" from any their friends know how to prepare. Another point which is generally kept prominently in mind is to provide so much food that the people eating it will become as full as possible, and it would almost appear that the meal is not regarded as a complete success unless everyone feels stuffy after partaking of it. Quite frequently, too, in preparing food for one's own family, an attempt is made to furnish as large a quantity as possible with the least expenditure of money.

The most important points, however, for the housewife to take into consideration in the preparation of the meal are:—

1. So to combine the different foods at a meal that they will be correct from the standpoint of physiological chemistry, that is, that incompatible mixtures will not be used.
2. To prepare foods so that they will be easily digested and assimilated.
3. To understand the necessity for supplying, not necessarily at one meal, but in the course of the day, all of the elements necessary for the body's growth.
4. To serve only such a quantity of the different foods that no one will feel stuffy after eating.

It must be understood that it is not what we eat indiscriminately that supplies our bodies, but what we digest and assimilate and convert into tissue. Even though the most wholesome food is used, so long as it is so improp-

erly mixed with other foods that there is a constant battle going on between the different foodstuffs in the stomach and intestines, the body will be unable to extract the nourishment it requires, at least not without a great expense and waste of energy. As every chemist knows, there are just as many antagonistic chemicals in the test tube in the laboratory as there are those that blend easily, so in like manner in the human digestive apparatus foods must be considered from the standpoint of proper agreement during the chemical digestion in the stomach and intestines.

The simplest plan which has yet been suggested to solve the difficulty of improper food mixtures is the use of the "Mono" diet, where only one food is eaten at a time. I have personally known several people who lived on this diet plan for a considerable period, with apparent benefit. They used only one article of food at a time, eating as much as desired of that one particular food, and waiting until hungry again, when some other one food would be taken. I often prescribe such a diet for patients while under treatment, but it is improbable that the average person would be willing to live on such restricted fare for any length of time.

The most practical plan is without doubt to use one strongly nourishing food at a meal, in combination with other foods which combine well, are more easily digested, and fill up in an adequate manner. The two most important kinds of food, and those which are the "most nourishing" are the proteids and starches, and it seems advisable not to use both of these at the same meal. Possibly the simplest manner in which to set forth the best way of using these foods is to discuss each one separately from the particular point of view of combination with other foods. For fuller information as to the foods

themselves the chapters in the earlier portion of Division II of this book should be consulted.

Proteid Combinations. Meat is the principal proteid food, and is probably needed by the body more than any other foodstuff. It is digested in the human in much the same way as it is in a carnivorous animal. No changes take place in meat while it is in the mouth except that it is broken up into smaller particles. The saliva, or digestive juice of the mouth, does not have any effect upon meat whatever, as it does in the case of starch, and meat can be digested just as well in the stomach in large pieces as if finely masticated. The digestion of meat begins in the stomach and is almost entirely a chemical process, the meat being liquefied by the chemical action of the gastric juice upon it. Thus liquefied it is easily assimilated through the walls of the stomach, and in a well-balanced meal four-fifths of the proteid food is absorbed into the circulation in this fashion. The remaining one-fifth of this liquefied proteid passes into the small intestines, where it continues to be absorbed.

The digestive juice of the stomach is of an acid nature, and the digestive element in the gastric juice can act only in this acid medium. If starch is mixed with meat at a meal, on account of its being of an alkaline nature it will delay the digestion of the proteid in the stomach. Carnivorous animals live entirely upon flesh, and never eat any other article of food except when they are domesticated and taught to use some other foodstuff which has been flavored with milk or meat. In their natural state they devour their prey whole, and in this way, by eating bones and skin, get many of the necessary organic minerals. When man eats meat, however, he does not consume the bones and seldom the skin of the animal, but finds an even more valuable substitute by

using large quantities of the non-starchy vegetables and fruits. These provide bulk to be mixed with the proteid, and assist in its digestion.

I believe the simplest way in which to remember how to use proteid food to the best advantage is to bear in mind that when you are eating a proteid meal you are taking what might be called "tiger food," that is, you are eating such food as a tiger might eat, except that you are substituting non-starchy vegetables and fruits for the bones and skin which the tiger would demolish entirely. It is as a general rule not wise to mix with meat any of those foods which require complete mastication, such as the grains and tubers which contain a large amount of starch. The following specimen meals contain good proteid combinations:

1. Lean beef, cooked spinach, and celery.
2. Roast mutton, cooked asparagus, raw celery.
3. Broiled fish, salad of lettuce, tomatoes, and cucumbers.
4. Coddled eggs, Melba toast, stewed prunes.

Starches. As the first step in the digestion of starch begins in the mouth, it is well to masticate all starchy foods thoroughly so as to mix them with saliva. Acid fruit should not be used with starch, first of all because the acid will counteract the alkaline saliva of the mouth, which is necessary for the digestion of the starch, and also because the fruit acid will stimulate the flow of gastric juice which is not needed for the starch digestion. If proteid food is used with starch the starch will always be delayed in the stomach waiting for the proteid to be digested, and in consequence will reach the intestines in an acid condition which it is difficult for the alkaline bile to overcome. If proteid and starch are used at the same meal the starch will be rendered unfit for digestion in the small intestines by this delay in the stomach and the pro-

teid food will not be as perfectly digested and assimilated because of the starch interference.

Starch is a very concentrated food and requires the combination of some other bulky foods such as the non-starchy and salad vegetables to assist in separating it thoroughly, so that the digestive juices may penetrate and the starch be more easily digested. Those animals, such as the cow, which use the largest amount of starch, masticate the starchy grains which they eat, and their chewing of the cud is simply for the purpose of digesting the starch by the action of their saliva. They also grind up along with the starch all of the green succulent vegetables they can find, and when man eats starchy food, exactly the same combinations should be used as the farmer feeds to such of his cattle as chew the cud, excepting that in place of hay, man confines himself to the tender, succulent, non-starchy vegetables.

Cattle must always be given enough hay with their grain, and whenever a domestic animal breaks into the grain bin and eats too much of this kind of starch without having hay at the same time, the animal is liable to die from violent digestive disturbances. I do not believe that we should copy the animals exactly in our habits of eating, but I oftentimes find that the successful farmer is more careful about the feeding of his cattle than he is in the feeding of his children or of himself, and it is reasonable enough at times to look for valuable lessons from some of these homely animal comparisons.

Man is able to live on both carnivorous food and herbivorous, and it seems to be one of the greatest secrets of dietetics to know that although man may subsist on either tiger's food or cow's food, the tiger food and the cow food should not be mixed together at the same meal.

Another important point to be remembered in connection with the use of starch is that each starch has a

different cell structure from the rest, and therefore it is not advisable to use two kinds of starch at the same meal, but is much better to take as much as may be necessary of only one kind. Strong seasoning, spices, condiments, pickles, etc., should not be used with starchy food, as too much gastric juice is secreted if these are eaten, and while their use might be excusable with proteid foods, when used with starches the acid state of the stomach which they produce, directly interferes with the starch digestion. The following specimen meals will give you some idea of the different forms in which starch may be taken and combined with other foods:—

1. Baked potato, cooked spinach and string beans, raw celery.
2. Boiled rice, cooked cucumbers, salad of cucumbers and lettuce.
3. Whole-wheat mush, salad of raw grated carrots on lettuce.
4. Corn bread, cooked asparagus, raw cabbage.

SUMMARY OF RULES FOR COMBINATIONS

Proteid Rule— Any one proteid may be used with one or more cooked and raw non-starchy vegetables, with the addition of one kind of fruit either raw or cooked, as recommended.

Starch Rule— Any one starch may be used with one or more cooked and raw non-starchy vegetables. No fruit should be used with this meal.

Non-Starchy Rule— One or more non-starchy vegetables, either raw or cooked, may be used with either one starch or one proteid, or with any one other article of food such as milk, toast, or fruit.

- Fruit Rule— One fruit, as recommended, either raw or cooked, may be used with a proteid meal, or with milk, or with any non-starchy vegetable.
CAUTION—Fruit should never be used with starch.
- Toast Rule— Toasted food may be used with any other article of food.
- Milk Rule— Milk may be used by itself or with any one kind of fruit or with one or more non-starchy vegetables.
- Dessert Rule— Any good dessert may be used in combination with any non-starchy or salad vegetables, or in addition to a proteid meal, but never with starchy food.

NOTE :—Whole-wheat crackers or muffins may be used in a limited quantity with either proteid or starchy foods by those in good health. This seems to be an exception to the general rules regulating the use of proteids and starches.

CHAPTER XIV

MENUS

MENU No. 1

Suggested for Brain Workers—Those Inclined to Obesity—
Catarrhal Disorders—Asthma or High Blood Pressure.

<i>Sunday</i>	<i>Breakfast:</i> One coddled egg, one waffle, dish of stewed raisins. <i>Lunch:</i> Raw apples as desired. <i>Dinner:</i> Roast chicken, cooked cucumbers, cooked spinach, raw celery, jello.
<i>Monday</i>	<i>Breakfast:</i> Two poached eggs on Melba toast, stewed apricots. <i>Lunch:</i> Glass of orange juice. <i>Dinner:</i> Roast beef, cooked string beans, cooked asparagus, salad of tomatoes and lettuce, five stewed prunes.
<i>Tuesday</i>	<i>Breakfast:</i> Dish of cottage cheese, four or five pieces Melba toast, five stewed prunes. <i>Lunch:</i> As many pears as desired. <i>Dinner:</i> Broiled Belgian hare, cooked celery, cooked lima squash, salad of cucumber and lettuce, apricot whip.
<i>Wednesday</i>	<i>Breakfast:</i> French omelet on toast, baked apple. <i>Lunch:</i> Fresh apricots and two ounces Pecan nuts. <i>Dinner:</i> Leg of mutton, cooked small carrots, cooked lettuce, raw celery, baked pear.
<i>Thursday</i>	<i>Breakfast:</i> Two coddled eggs, three toasted triscuits, five stewed figs. <i>Lunch:</i> One pound of cherries. <i>Dinner:</i> Salisbury steak, cooked tomatoes, cooked zucchini, salad of lettuce, tomatoes and cucumber.

Friday	{	Breakfast:	French omelet of whites of two eggs and two ounces of milk, on Melba toast, stewed pears.
		Lunch:	Dish of cottage cheese and fresh peaches.
		Dinner:	Broiled filet of sole, cooked spinach, tomato salad.
Saturday	{	Breakfast:	Two eggs poached in milk and served on toasted shredded wheat biscuit, five stewed prunes.
		Lunch:	One pound of grapes.
		Dinner:	Broiled steak, cooked oyster plant, salad of grated small carrots on lettuce, apple whip.

MENU No. 2

Suggested as an increase of starch for those included under Menu No. 1 who take sufficient physical culture exercise.

Sunday	{	Breakfast:	Two coddled eggs, four or five pieces of Melba toast, five stewed prunes.
		Lunch:	Corn bread, string beans, raw celery.
		Dinner:	Broiled chicken, zucchini, spinach, lettuce, stewed raisins.
Monday	{	Breakfast:	French omelet, toasted triscuit, stewed apples.
		Lunch:	Macaroni, spinach, head lettuce.
		Dinner:	Roast mutton, stewed egg plant, salad of cucumber and lettuce, jello.
Tuesday	{	Breakfast:	One coddled egg, Melba toast, stewed apricots.
		Lunch:	Baking-powder biscuits, string beans, egg plant, cucumber.
		Dinner:	Roast Belgian Hare, mashed carrots and turnips, raw celery.
Wednesday	{	Breakfast:	Cottage cheese, toasted shredded wheat biscuit, stewed figs.
		Lunch:	Sweet corn, cooked asparagus, raw carrots.
		Dinner:	Roast beef, cooked mashed pumpkin, spinach, sliced tomato.

Thursday { *Breakfast:* Two eggs poached in milk and served on Melba toast, baked apple.
Lunch: Spaghetti, string beans, head lettuce.
Dinner: Roast chicken, baked ground beets, spinach, grated carrots on lettuce.

Friday { *Breakfast:* French omelet with whites of two eggs on toasted triscuit, stewed raisins.
Lunch: Cooked carrots, oyster plant, raw celery.
Dinner: Broiled halibut, baked egg plant, salad of tomato and lettuce.

Saturday { *Breakfast:* Whole wheat muffins, peanut butter, stewed pears.
Lunch: Rice, string beans, celery, salad of raw cabbage.
Dinner: Salisbury steak, spinach, salad of cucumber, tomato and lettuce.

MENU NO. 3

Suggested for Those Doing Hard Muscular Work or Taking Sufficient Vigorous Exercise.

Sunday { *Breakfast:* One coddled egg, small piece of ham, waffle, five stewed prunes.
Lunch: Boiled rice, salad of celery and grated carrots on lettuce.
Dinner: Broiled chicken, cooked celery and cooked lettuce, grated beets on lettuce, baked apple.

Monday { *Breakfast:* Mush of ground whole wheat, one coddled egg, two or three pieces Melba toast.
Lunch: Baked potato, cold cooked asparagus, raw cabbage.
Dinner: Baked Belgian hare, cooked string beans and asparagus, raw celery, prune whip.

Tuesday	{ <div> <i>Breakfast:</i> French omelet on toasted triscuit, stewed apple sauce. <i>Lunch:</i> Corn bread, cooked spinach, raw celery. <i>Dinner:</i> Roast beef, cooked spinach and parsley, salad of cucumber, stewed apricots. </div>
Wednesday	{ <div> <i>Breakfast:</i> Two coddled eggs, four or five whole wheat muffins. <i>Lunch:</i> Boiled macaroni, cooked summer squash and head lettuce. <i>Dinner:</i> Roast mutton, cooked asparagus and celery, raw tomatoes, five stewed prunes. </div>
Thursday	{ <div> <i>Breakfast:</i> Two eggs poached in milk and put on toasted shredded wheat biscuit, stewed apricots. <i>Lunch:</i> Baked squash, string beans, raw grated carrots on lettuce. <i>Dinner:</i> Broiled steak, cooked chayotes and spinach, raw celery, jello. </div>
Friday	{ <div> <i>Breakfast:</i> French omelet or five pieces of Melba toast, stewed raisins. <i>Lunch:</i> Cooked carrots, cooked celery, cooked spinach. <i>Dinner:</i> Broiled sea bass, salad of lettuce, tomatoes and cucumber, stewed figs. </div>
Saturday	{ <div> <i>Breakfast:</i> Dish of whole wheat mush, one coddled egg, two or three whole wheat muffins. <i>Lunch:</i> Sweet corn, baked parsnips, raw celery. <i>Dinner:</i> Salisbury steak, cooked spinach and celery, salad of tomatoes and lettuce, stewed pears. </div>

CHAPTER XV

CHILDREN'S DIET

When it is necessary to wean the child from its mother's milk, the best substitute will be found to be raw cow's milk. For instance, a child of ten months when he is being weaned should be given from 5 to 8 ozs. of cow's milk every four hours. Each feeding of milk should be preceded by one or two teaspoonfuls of sweet orange juice. Start out by giving the baby 5 ozs. of milk, and gradually increase to 8 ozs., stopping the increase only when the child shows it is getting too much by having some of the curd come up in its mouth.

Follow this up by four feedings a day of from 20 to 32 ozs. of milk in addition to the orange juice used. If constipation exists, try increasing the orange juice to three or four teaspoonfuls before each feeding. If this does not bring about the desired results, reduce the orange juice to one or two teaspoonfuls as before, and add one teaspoonful of milk of magnesia to each quart of milk, shaking the magnesia up in the milk each time before the milk is poured from the bottle into the nursing bottle.

Sometimes you will find that a child of ten months cannot take enough milk at a time to get in a sufficient quantity in the four feedings. If this is the case it is quite allowable to give the feedings every three hours, using only 4 to 5 ozs. at a time. Under no circumstances should any other food be added to the milk, and it should never be diluted with water. This milk diet may be continued until the child is about two years of age. If any other food is added before that age is reached it should only be cooked non-starchy vegetables. Small por-

tions of meat or starchy food given to a child who is using milk will often bring about serious digestive disturbance.

Milk is an ideal food for the growing child, and with the addition of the orange juice it would be possible for a baby to grow into a strong adult without any other food ever being added. The longer the baby is kept on the milk diet the stronger you will find its digestion when it is finally given other foods. Cow's milk contains more bone-building properties than even mother's milk, but of course this means milk in the raw state and not pasteurized. If desirable the milk may be warmed slightly by placing the nursing bottle in a pan of warm water which has been removed from the fire. The water must be of such a temperature that the hands may be placed in it without burning. If the water is steaming hot so that the hands cannot be placed in it you will find that the milk will become pasteurized, and the organic salts will become precipitated and changed into useless minerals which the body cannot use. People who object to using pasteurized milk because it is devitalized often heat the raw milk to a greater temperature than that which is used in pasteurizing, and consequently destroy most of the good which is in the raw milk.

If after the end of two years it seems advisable to give the child any other food than milk, a good way to make the change is to give a bottle of milk at 6 a. m. and another feeding 3 hours later, at 9 a. m. A meal may then be given some time between 12 and 1 o'clock, using one kind of starchy food and the choice of one or two non-starchy vegetables. At this age the child's teeth are not sufficiently well developed for perfect mastication, so it is best to mince the vegetables up slightly or run them through a food grinder before cooking. No milk should be added to this meal, but a small amount of cream or butter may be served with the minced vegetables.

Care should always be taken to see that no other food is on the table when the child is eating its own selected foods, and to get the very best results it seems advisable to feed the child by itself unless those who are eating at the same time are willing to use the child's food combinations. No food should be given during the afternoon, and if the child should happen to ask for some, it will be found that a drink of water will generally satisfy until it is time for the evening meal, when the following combinations should be used:—

Small piece of lean beef, mutton, chicken, or rabbit.

Choice of as many as desired of the non-starchy vegetables.

Dessert of stewed fruit or jello with cream, or whipped cream if desired.

The meat and vegetables used at this meal should also be cut up fine, and the baby should be given no "tastes" of any other food or it will become dissatisfied and want every food in sight. It is a good plan to feed the baby by itself before the rest of the family, as in this way it can be given exactly what food it needs without being tempted by other things, and the mother will have an opportunity of enjoying her own dinner when the time comes, without having to look after the child at the same time. This is not the plan generally followed in most households, but if you adopt it with the baby from the start you will find it will work out well.

After a time the child will become dissatisfied with milk alone in the early part of the day, mainly because of being curious to know what other foods taste like that it sees the family using at breakfast, and after the age of three or four years it will usually be found desirable to change to a three-meal plan. The feeding of the baby at this time should be practically the same as that for an adult who is doing hard muscular labor, excepting of

course that the quantities should be smaller. The growing child can use a larger amount of carbohydrates, that is sugars and starches, than after reaching maturity, but there will always be present the dangers in connection with the use of starch in the baby's diet that are to be guarded against by the adult who is using more starch and sugar than his body needs for heat and energy.

If the baby seems subject to colds or the tonsils are enlarged above the normal, or if there is a tendency to over-weight, it might become necessary to eliminate starches altogether until such tendencies are overcome. The child should not be allowed to eat between meals, not even fruit, and it may be said that if regularity of meals is ever important it is doubly so during childhood. Children should be taught what foods are best for them and encouraged to use such foods, rather than be constantly told that certain things "are not good for them." If the parents do not understand the philosophy of feeding, of course, they are not able to impart this knowledge to their children, but if they do understand and if they live according to strict dietetic rules, their example will be the best teaching their children could obtain.

If children learn that certain foods combined together make for good health, the impression made upon their minds will be just as distinct and permanent as when they learn in arithmetic that two and two make four. Try to make the child understand that eating the right food in proper combination with other foods will give them the material out of which to build a strong body, so that they will be able to experience the joy of winning contests both on the athletic field and in the class room, but do not expect your advice to be taken seriously unless you as a parent really believe what you are teaching, and prove it by setting a good example before your children.

MENU

Suggested for children from breast nursing to about 2 years:—

At 6 a.m., 9 a.m., 12 noon, 3 p.m., and 6 p.m.

Take 4 to 6 ozs. of raw cow's milk, each feeding to be preceded by 1 or 2 teaspoonfuls of orange juice.

The milk should be sucked through a nipple if possible.

No feeding at night except warm water if desired.

Or as an alternative

At 6 a.m., 10 a.m., 2 p.m., and 6 p.m.

Take 5 to 8 ozs. of milk, preceding each feeding by 1 or 2 teaspoonfuls of orange juice as above.

For children from about 2 years to 3 years:—

At 6 a.m., and 9 a.m.

Take 6 to 8 ozs. of raw cow's milk, preceded by 2 or 3 teaspoonfuls of orange juice.

Between 12 noon and 1 p.m. take

One starchy food

One or more non-starchy vegetables

One salad vegetable

SPECIMEN MEALS:

(1)	(2)	(3)
Baked potato	Corn bread	Boiled rice
Spinach	String beans	Summer squash
Grated carrots	Celery	Lettuce

At 6 p. m. take

One proteid food

One or more non-starchy vegetables

One salad vegetable

Dessert

SPECIMEN MEALS:

(1)	(2)	(3)
Broiled steak	Roast chicken	Mutton chop
Asparagus	Spinach	String beans
Celery	Celery	Grated carrots
Baked apple	Jello	Stewed prunes

For children above 3 years of age a menu is suggested similar to that on page 298 for those doing hard muscular work, excepting that the quantities would be smaller.

CHAPTER XVI

SOME RULES ON EATING

1. Eat only when really hungry, and nothing but the simplest and plainest of food. Do not eat anything at all if it is necessary to excite the appetite with condiments, spices, etc. The body can never be hungry for a pickle, but can only be excited by it. Hunger and appetite are really very different, and one must not be mistaken for the other.

2. Do not eat if you are tired, but first of all refresh yourself with rest, as you will only be hungry when you are strong and well poised. Although appetite may exist for food because of tasty-looking dishes, the food that you eat when in an exhausted condition will only act as a poison to you because you will not have enough energy to digest it.

3. When exercise is taken before a meal there should always be a sufficient period of relaxation before commencing to eat.

4. Regularity of meals is important, as the digestive organs seem to function much better if accustomed to periodical rest and work.

5. Three well-balanced meals seems to be the best rule to follow, unless assimilation is so perfect that two meals are sufficient. In that event it is best to omit the noonday meal and use only breakfast and dinner, making two fast periods of 12 hours each.

6. Each meal should be made as simple as possible and with the smallest number of combinations of food-stuffs. Variety may be introduced at the different meals, however, so as not to repeat a certain food unless especially preferred.

7. Drinking water during the meal or afterwards is allowable if the food is not washed down with the liquid. If there is much thirst it will be well to check up on your salt ration, as those who use plenty of leafy green vegetables will generally find sufficient water in their food, unless too much salt is taken.

8. Eat only when feeling well, and never when suffering from nausea, pain, headache, fever, or any distressing or discomforting symptom of disease. Many serious ailments will never have an opportunity of developing if this rule is followed at the first sign of approaching danger. Whenever it seems necessary to miss a meal or two, remember to take one or two enemas, in order to cleanse the colon from fecal matter which will accumulate because of the absence of material in the intestines from meals which have been missed, and which if eaten would have helped to evacuate the accumulation of feces.

9. Serve yourself with only a small amount of each article of food, so that you may keep your combinations correct and not overeat of any particular food. Do not fear that you will be insufficiently nourished if the proper kind of food is eaten. Not more than one-half the amount of food at the ordinary meal is really necessary, and the rest we eat at our peril. In all my experience I do not know of a single case of a patient who suffered because too small an amount of food was eaten, provided the food actually taken was of the proper class and quality needed for the body.

10. Dislike for a certain article of food or certain mental or ethical objections must be considered, and the substitution of another kind of nourishment of the same class is often necessary until the person is able to overcome this mental handicap.

11. Mastication of the starches is especially im-

portant, since mouth digestion is absolutely essential to bring about the chemical changes necessary for the proper assimilation of starches. In addition all food will be digested more thoroughly from the enjoyment of the taste produced when there has been proper mastication.

12. Use only such an amount of starch as the body can build into heat and energy, as any surplus which cannot be consumed in the physiological processes will be a handicap to the body and the cause of many diseases.

13. An ample amount of proteid in the daily fare is of the utmost importance in order to effect repairs in the cell structures and muscles, and to bring about the necessary changes in the cells themselves. These cells cannot be replaced or built up with any other substance such as starch, any more than the worn-out parts of an engine can be replaced with gasoline.

14. Be sure to have enough "roughage" in the diet, as the more concentrated food materials are more easily digested and assimilated in this element, and its presence ensures sufficient bulk for suitable intestinal elimination of waste and toxic substances. You will find it almost impossible to overeat on this class of food, whereas great care must be exercised in regulating the amount of such foods as proteids and starches.

15. Uncooked salad vegetables are as essential to the body as the foundation stones are to a beautiful mansion, for the vital organic minerals are to be found only in these foods in any appreciable quantity. They furnish all of the vitamins necessary for the body, and in fact are the only foods which contain these vitamins to any extent.

16. Unhappy mental states paralyze digestion, and when the body is under the control of fear, hatred, criticism, jealousy, or any of the destructive emotions, the

food taken into the stomach acts as a direct poison to the body, and although its action is generally slower, the poisoning is as sure as that of carbolic acid. It is the direct cause of many diseases, and the contributing cause of many others. Better a banquet of inharmonious food mixtures coupled with the joy usually present on such occasions, than the everyday gloom of the family table.

CHAPTER XVII

SUGGESTIONS FOR A DAILY REGIME

Upon arising in the morning it is always a good plan to take some form of physical culture exercise, either walking, or the calisthenic movements explained in the chapter on Exercise and Digestion. If you go for a walk the best plan is to dress in some heavy clothing and walk rapidly, so as to produce profuse perspiration, then take the calisthenic exercises upon completing the walk. Walking is one of the most valuable exercises, but will never supply the proper benefit to the system unless the other exercises are taken as well, especially those lying on the back and face downward, where the abdominal and back muscles are brought into play.

Do not miss a morning without taking some of these exercises for at least ten minutes. Follow the walk and exercises by a cold shower bath. After this is the proper time for a man to shave himself and dress for the day, and for a woman to dress herself and get ready to prepare breakfast. The breakfast may consist of any of those combinations suggested in the chapter on Menus, or any other combination of food on the lines laid down which it may be more convenient to use at the time. It is of course permissible to use the combinations suggested for lunch or the evening meal at breakfast time, simply changing the places of the different meals.

After breakfast a regular habit should be formed of going to the toilet and sitting there until the proper bowel evacuation takes place. It is not a good plan to read the paper at this time, but to concentrate upon the necessary function.

Between breakfast and lunch, if you are able to take

the time, a walk of one or two miles would be very beneficial. If you are a housewife it ought to be possible to arrange this, as you can regulate your work accordingly. Those working in offices however will not always be able to find the time except on Sundays.

Lunch may consist of any suitable combination, but I would especially refer you to those suggestions given in the chapter on Food Combinations. During the afternoon, if it is possible, a walk of a mile or two is again recommended. Those men who are working in offices will find that after work in the evening is the best time for the hardest physical exercises, which should be taken at this time. A most desirable way to get this exercise is to go to a gymnasium and go through the various forms of exercise which are used there. Boxing and wrestling, handball, exercises with chest weights, and other such vigorous exertions are especially recommended. In almost any city nowadays there is a gymnasium of some kind with a competent physical instructor in charge who can, if need be, give private instruction in exercises with the different kinds of apparatus available.

You need allow only about an hour for this exercising including dressing and undressing, and if this is taken three times a week it will help you very greatly in keeping well, and will allow you to use a larger variety of food and a more generous diet. In some cities there are gymnasiums for women where they can go during the middle of the afternoon and indulge in those vigorous exercises which they have had to do without since the days of childhood. If this exercise is taken in the middle of the afternoon there will still be sufficient time to get home and prepare the evening meal.

A surprising thing that will be noted if exercise of this kind is taken during the day is that you will not

require as much sleep as you have been accustomed to, and you will observe that the physical culture exercising has actually rejuvenated your body to such an extent that not more than eight hours' sleep will be necessary. I have found some people who could cut down their hours of sleep to much less than this simply by increasing the amount of physical culture exercise they took. This does not exactly mean increasing the amount of work they were doing, but rather in adopting those particular exercises which are especially recommended in this book as vitality building.

Dinner may consist of any food which is used in proper combination, but I usually advise what I call the "proteid" meal in the evening, consisting of 1 proteid food, 1 or more non-starchy cooked vegetables, a salad of raw vegetables, and sometimes a dessert of stewed fruit. This kind of meal seems to digest more readily in the evening than any other, and may be taken more freely without any bad consequences by those troubled with insomnia or asthma, disorders in which a meal in the evening seems to interfere with sleep. However, if it is desirable, a starchy meal may be used in place of a proteid meal.

Some evenings should be spent at home reading and studying, but a certain number should also be devoted each week to attending entertainments and amusements such as picture shows, theatres, lectures, etc. It is a good plan to set aside certain evenings in the week to do this, even though you feel inclined to stay at home every night. The outside association will be of great benefit to you, and your interest in pleasurable amusements will really assist in digestion and be an aid in the cultivation of more perfect health.

Before retiring each night the same exercises should

be taken that are taken before breakfast in the morning. These exercises should be completed in ten or fifteen minutes, followed by a warm shower bath. Sometimes it is the best plan to sit in an easy chair and read for a few minutes before going to bed after taking your bath, as the exercises and bath will often improve circulation to the extent that you will not be able to go to sleep easily, whereas if you relax and read for a few minutes you will be able to drop immediately into a refreshing slumber.

When you do go to sleep be sure that it is with the belief that you will waken up with abundant strength and vitality. Keep that thought constantly in mind as you are going to sleep, and do not make the mistake of giving yourself such bad suggestions as the following: "I am so tired"; "I can hardly undress I am so tired"; "I feel exhausted"; "I have had such a hard day's work I am all in." If you go to bed with these thoughts on your mind as sure as the sun rises you will awaken in the morning with the same tired feeling that you went to bed with, while if you go to sleep with the constant thought of increased strength, repeating over and over to yourself such words as "Strength, Power, Vitality," you will find you will be much more refreshed from the sleep you enjoyed, during which time the mind was unconsciously dwelling upon these good suggestions. This is a very essential point indeed, and I assure you I would not mention it here unless I considered it very valuable.

CHAPTER XVIII

BATHING

I believe it is advisable to take some kind of bath once or twice daily in order to keep the pores of the skin cleansed and free from the impurities of the body which are thrown out through them. The best kind of bath for all purposes is the shower bath. If you do not have a built shower bath in your home an attachment may be purchased at the drug store at a nominal sum which can be connected to an ordinary faucet in the bath tub, and which will provide you with an excellent form of shower bath. You can squat down in the tub and spray your entire body with a stream of warm water, soaping afterwards if desired and washing off again with cold water. At least one or two of these baths should be taken daily, and if exercises are taken morning and night they should always be followed by a warm or preferably cold shower bath.

I want to take this opportunity to condemn especially the ordinary bath tub where the bather sits or lies in a tub of hot water and tries to soak the dirt out of the pores, only succeeding in retarding their activity by making them more lifeless through the effect of the warm soapy water. From experiments I have made I am convinced that lying in a tub of warm water which has been heated in the hot water heater is devitalizing to the human body. It seems that the magnetism of the body is carried off in the water, and this devitalized hot water, by absorbing the bodily energies, really reduces the bather to exhaustion. This is not the case when bathing in cold water or natural running water, when the body seems to be in many cases re-energized or strengthened by such bathing.

Mineral Water Baths can be had at natural mineral springs where the water issues from the ground at different temperatures. These waters contain different kinds of alkalis, and their curative effect depends entirely upon the fact that some of the acidity of the body is counteracted by both bathing in and drinking this water. Its good effects are usually only temporary, and precisely the same effects could be secured if the bather would use his own bath tub and simply add epsom salts and bicarbonate of soda to the water. I do not especially recommend this as a treatment, but in some cases of rheumatism and kindred ailments relief will often be found in an immersion in warm water to which has been added either epsom salts or soda, or both. These baths are only to be taken as an emergency relief and should not be continued for any length of time.

Sitz Baths are taken in either hot or cold water by sitting in about 7 or 8 inches of water in the bath tub. The hot sitz bath is the one most commonly used to relieve congestion in any of the pelvic organs, such as is present in cystitis, inflammation of the womb or ovaries, or in prostatic troubles. The water should be made as hot as it is possible to endure, and the bath should last from five to ten minutes, or at any rate until the skin becomes quite red. The feet may be kept in the water at the same time as the hips, but the other parts of the body should not be wet if you wish to secure the local effect through the pelvis.

Internal Bathing, or Enemas, I consider to be the most effective single remedy with which I am familiar that can be used in almost every acute or chronic disease. When I get an emergency call in a case of sickness I always advise an enema to be administered at once, and after giving such advice over the telephone I usually find that by the time I make the call the patient has recovered,

at least to some extent, through this simple method of treatment. Not only are poisons in the intestines removed by the enema, but any nerve centers in the abdomen such as are found around the uterus, ovaries, or rectum, will be instantly relieved from the pressure of the accumulated feces or gas if the enema is taken correctly and brings about satisfactory results.

The apparatus used for administering an enema may be purchased in any drug store, and consists of a rubber bag or enameled can to which is attached a long rubber tube with an attachment at the end for inserting into the rectum. The container should be hung up on the wall about four or five feet above the floor, so that the water will flow by gravity.

The best position to assume in taking the enema is what is called the "knee chest" position, where the patient kneels on the floor with the hips elevated, and at the same time rests the chest against the floor. The ordinary enema should be of warm water, and usually one quart is sufficient. The water should be allowed to flow in very slowly while the patient is in the knee chest position. It may even be necessary to pinch the tube off occasionally so that the water runs for a few seconds and is then stopped and the intestine allowed to take care of the water which has been accumulated within it. The tube may then be released, and a small amount of water again allowed to run, and then stopped once more and a rest taken. After the entire quart is in the intestines the tube should be removed, and the patient should then lie on the back on the floor and churn the stomach up and down vigorously so that the water will be well mixed with the feces all through the large colon.

After about five minutes in this position the water may then be expelled while sitting on the toilet, but great

care should be exercised in allowing the water to escape only very slowly, so that the delicate rectal membranes are not injured by the forced rapid expulsion of feces and water, which is often made more violent by intestinal gases which are pressing the contents of the intestines out.

These enemas may be taken when constipated or whenever you are feeling ill from any cause, as it is most remarkable how different kinds of ailments will be relieved by this procedure, even though you may not understand why such an effect should be produced.

CHAPTER XIX

EXERCISE AND DIGESTION

In these days when mental work yields so much greater financial returns than mere physical work, it is important to urge, especially upon brain workers, the necessity for more vigorous exercise. A sufficient amount of exercise is needed to encourage the growth of the muscular cells, to keep the circulation of the blood up to the normal, and to insure more perfect assimilation of the food taken, this assimilation being at its best when the muscles are sufficiently exercised and call on the system for plenty of nourishment.

The quantity of food taken at meals does not need to be so carefully limited if a proper amount of vigorous exercise is indulged in. The brain worker may be poisoned into sickness by perfectly good food which has not been properly digested and assimilated on account of its being used in excess over and above the demands of the system for material for repair and growth, while on the other hand the man working at hard muscular labor might be able to use exactly the same foods and quantities as the brain worker without fear of injury.

The most desirable form of exercise from every standpoint is some kind of outdoor sport such as baseball, golf, or hiking, and these should be indulged in with regularity if you can find some particular one that you enjoy. However, these play exercises should also be supplemented by certain calisthenic exercises, which can be taken at home once or twice daily. Although exercise of the entire body is needed, very beneficial results will be found to come from well directed physical culture exercises, especially those which develop the muscles of the torso or

trunk. Those exercises, taken while lying on the back, develop more particularly the abdominal muscles, and when these muscles are well developed they will assist in holding the vital organs of the abdomen in place. This development will prevent prolapsus, and will gradually raise any prolapsed organs to the normal position.

The exercises taken while lying face downward develop the different muscles attached to the spine, and such development will hold the vertebrae of the spine in their proper place. In the exercises of this kind given in the following pages, the spinal muscles may be so strongly developed in a few months' time that neither the osteopath nor the chiropractor will be able to find a subluxated (partially dislocated) vertebra. These subluxated vertebrae, which pinch upon the nerves issuing from the spine, are the direct or indirect cause of different diseases brought about by the shutting off of the nerve supply to the various parts of the body served by these particular nerves.

While these exercises are being practised for the development of the back muscles, it is advisable at the same time to keep up osteopathic or chiropractic treatments until the muscles attached to the spine have developed sufficient strength through the exercising to hold the vertebrae in the normal position.

The exercises which are given to be taken in the standing position do not require a great deal of muscular energy for their performance, nor do they develop muscle to any appreciable extent, but should be considered valuable nevertheless because of inducing a better flow of blood to the extremities and also as a form of treatment. They should be performed regularly for their stretching, twisting, and vitalizing effect, which effect is similar to

that which would be received from taking massage, osteopathic, or chiropractic treatment.

If you start taking these exercises go through the entire list first of all, doing the easy ones a greater number of times than the more difficult ones, and as strength and ability develop, gradually eliminate the easier exercises altogether and do only those which you found hard in the first instance. You will find that as your muscular power increases you can concentrate your time on only a few of the exercises taken from each position, and if you will do these as vigorously as you can, after two or three weeks you will find that ten minutes' time twice daily will be sufficient for you, provided only the hard, strenuous exercises are indulged in.

The exercises referred to are as follows:—

SPECIAL EXERCISES

STANDING

1. Hands at sides—open and close the fists vigorously. Hands extended at sides—shoulders high—repeat. Hands extended at front—shoulders high—repeat. Hands extended over head—shoulders high—repeat.

2. Hands clasped behind neck—bend to the left and then to the right—keeping the knees stiff. Bend forward and then backward—keeping the knees stiff. Twist body to the right as far as possible—then to the left as far as possible—keeping the hips motionless and the knees stiff.

3. Hands extended over the head—swing the arms vigorously in opposite directions in a circle in front of the body.

4. Arms over head—fists clenched—raise on toes, at the same time opening the fists vigorously. Then back to the first position. Inhale as you raise yourself on toes, and exhale as you return to the first position.

5. Hands open at sides, palms to the back—raise arms in front over head and back as far as possible. Inhale as you do so and throw the head back, looking as far back on the ceiling behind you as possible. Then return to the first position, exhaling as you do so.

LYING ON BACK

1. Hands extended over head. Raise upper body—keeping knees stiff—touch the legs as far towards the feet as possible with the finger tips.

2. Raise knees alternately to chest and return. Raise knees together to chest and return.

3. Raise and lower legs alternately—keeping the knees stiff and toes pointed downward.

4. Raise and lower both legs together—keeping knees stiff and toes pointed downward.

5. Raise right leg to right angle with body, keeping the toes pointed downward—then change position of right and left legs vigorously, without allowing the heels to touch the floor. Try to breathe naturally during this exercise.

6. Extend arms on floor at right angles to body—palms pointing downward—keep the arms and shoulders in this position and bring the right foot over and touch the left hand—twisting the body and bending the knee as much as necessary to do so. Return to original position and repeat with left foot, touching the right hand.

7. Arms over head—raise both arms and both legs together, at the same time keeping knees stiff and touching the legs as far down towards the feet as possible.

8. Hands clasped behind head—slowly raise the arms, head, and shoulders as high as possible, attempting to come to a sitting position.

LYING FACE DOWNWARD

1. Clasp hands behind neck—then raise head, shoulders, and elbows as high as possible, at the same time raising both legs, keeping knees stiff.

2. Raise and lower right and left legs alternately—keeping the knees stiff and bending the legs backward at the hips.

3. Arms extended straight over the head—raise the arms, head, and shoulders, at the same time raising the legs and keeping the knees stiff.

4. Hands pointing out straight over head—raise arms, shoulders, and head, also raise the legs, keeping the knees stiff. Inhale as you raise to this position, and exhale upon returning to original position. Next separate the hands to the distance of about two feet, and raise and lower as before. Then extend the hands straight out from the shoulders and repeat as before. Hands at the sides—repeat as before. Reverse the exercise, going back to the original position. As the strength of the back muscles develops you may make the exercise harder, changing the position of the arms only a few inches at a time. In the exercise as described you will have only four different positions of the arms, but this can easily be increased to fifteen or twenty by making a slight change in the position of the arms.

5. Arms extended straight out from side, with palms pointing downward—bring the right foot over and touch the left hand, bending the knee and twisting the body as much as possible, but keeping the chest and arms flat on the floor. Return to original position, and repeat with the left foot, touching the right hand.

Take these exercises both in the morning and evening, slowly at first, doing each one two or three times, and increasing as you are able. Do the exercises before an open window.

CHAPTER XX

THE MIND AND DIGESTION

It appears that every cell of the body has a kind of intelligence of its own. The instinctive habits of growth, motion, and assimilation are the result of the process of thought in each cell, of which we are ordinarily not consciously aware, but which is going on in every cell of the human body. The various groups of cells making up the different organs are also possessed of group intelligence which controls the action of that organ. It is still more or less of a mystery just where the intelligence originates which controls the functioning of the lungs, heart, digestion, etc., but the potent fact remains that the central governing power of the conscious mind is able so to direct the mental forces in the cells that this cell intelligence may be stimulated to more perfect functioning, or depressed enough to cause sickness and even death.

We are all sufficiently familiar with the sudden phenomenon of shock to the body produced by unexpected bad news, and to the sensation in the solar plexus caused by fear or anger. This acute effect upon the body has been observed by everyone at some time or other, but because recovery is so rapid very little serious thought is given to it. All psychologists, however, agree that about nine-tenths of our thinking is unconscious, that is to say, is instinctive, or becomes so much a habit that we are not aware of it. Yet it is these unconscious processes of thought from which we receive most good or harm according as their nature is constructive or destructive.

The ill effect produced by worry over some serious problem, or the sudden anger generated at a supposed wrong, can be only of small importance compared to the

hidden tendency to worry over every problem and to be in a chronic state of suppressed anger. The occasional outbreaks of sarcasm or criticism or jealousy displayed at meal time will undoubtedly upset digestion, but few seem to realize that the serious trouble which really exists is that chronic state of mind which is secretly depressing the normal functions of the body by the hidden workings of unlovely thoughts, which thoughts are directly responsible for those sudden outbursts of unwholesome ideas which find expression in fits of anger, jealousy, fear, and the like.

One who has suffered from digestive disturbance has vivid recollections of many unhappy hours, and there is no denying the fact that even though the best food is used and used in the right way, yet the unconscious expectancy of trouble is so deeply impressed upon the memory mind of habit that there will be set up a tendency to look for distressing symptoms which will prevent the enjoyment of normal digestion until this habit is overcome. Those who follow the dietetic instructions contained in this book will at once feel the good effects that will follow, but complete results will not be achieved until you learn to expect perfect digestion and vigorous health as a matter of course. The advice given in these pages is the cream of years of dietetic experience, and although it is presented to you in a style that may be easily understood, the desire at the same time is none the less earnest that you should receive the greatest possible good from these studies.

Especially I would urge upon you that you help yourselves in every way possible by cultivating the habit of looking for improvement in every direction day by day. You will be encouraged to this end by the immediate benefits you will receive if the instructions herein con-

tained are followed faithfully, and if you know that you are making a sincere effort to do everything in your power to help yourself it certainly will not be hard to imagine the improvement which you are entitled to receive from this dietetic regime.

As you go to the table cast aside every distressing thought, whether it be worry over business, fear of indigestion, jealousy in love, criticism of others, or in short any thought whatever that does not engender feelings of courage, love, confidence and poise. Do not discuss the news of the day nor the headlines in the newspapers, as such sensational material is generally of a nature to exercise a secretly depressing effect upon the digestive functions. If the food has been selected judiciously according to the best knowledge available, then proceed to concentrate upon its taste and flavor.

If talking will help you and those dining with you, then make suitable comments on any agreeable topics you can think of, even telling stories if need be. Brag about how good you feel and how well everyone at the table looks. Compliment those about you on whatsoever you can find praiseworthy in them or their arrangements. If you are at a party you will no doubt find it easy enough to say many pleasant things, and if at home it should be possible to maintain the same spirit which you have no difficulty in exhibiting before friends. Most people are apt to get into a kind of mental rut of inharmonious thought when at the table at home, probably enough because the home folks are forced by circumstances to submit to such ways, whereas the same actions if indulged in before others might lead to the loss of valuable friendships.

If the events of the day have been trying, it is much better to lie down and relax before the meal, and if possible change to fresh clean clothes before coming to the

table. Try to clean up mentally as well as physically before you offer yourself to your family in the evening, and before you partake of the food which has been carefully chosen for the nourishment of your body.

Do not make the mistake of using the "will" as an aid to digestion, but rather put into operation the powers of desire and expectancy, as these will be found to be much more powerful agents in bringing about the object you are trying to accomplish.

After you have partaken of what you honestly consider a wholesome repast, do not proceed to look for trouble, but expect to be unconscious of digestion, and give your mind and thoughts to any constructive or entertaining subject which pleases you.

If you look for gas and digestive discomfort you will probably be able to find them, even if they have to be manufactured to suit such a wrong expectancy of mind. I find many people troubled after a meal with what they thought was gas, but which usually turns out to be caused by swallowing air while trying to belch gas from the stomach when there really has been no excess fermentation at all. It is surprising how much discomfort can be caused by this habit in the case of one who has had the experience of many years of digestive disturbance and has learned to look for gas after every meal.

Time after time I have watched a patient under examination with the X-ray who has behaved exactly as I have indicated. When a meal is given to which is added a certain amount of barium sulphate the exact shape of the stomach can be seen with the aid of the fluoroscopic screen in the X-ray examination. When a gas pocket forms in the stomach it is plainly visible, and I have seen hundreds of patients start to try to belch up gas immediately after this test meal was given, when there was actually not a sign of gas in the stomach. I have seen

these same patients persist in their belching exercise until I could observe them swallow enough air to make a distinct air pocket, and then suffering from this supposed gas, going through all kinds of contortions in an effort to expel the air they had swallowed, in many cases actually "enjoying" more discomfort than would have been caused by the gas from an indigestible meal.

Those who develop the habit of taking soda after a meal often only expel the gas which the mixture of soda and stomach acid will invariably produce. After this gas has been expelled the patient will develop a real indigestion because of the fact that the alkaline soda has destroyed the digestive juice of the stomach, and the food cannot digest as well as if the soda had not been taken. If gas has actually been formed because of fermenting food it will come up easily by itself, and you do not have to search for it. There will often be a good deal of flatulence produced in the chronic dyspeptic even when good food is used, caused by digestive juices which have not so far been properly balanced by the digestive powers to enable them to take care of well proportioned meals, after the body has been so long accustomed to improper ones only. Some of these juices are alkaline and others acid, and if there is an excess supply, the amount left over, which is not used in the process of digestion, will often make gas by the combination of the alkali and acid. This will gradually disappear as the proper foods are used in the right amounts and combinations.

In a book of this nature it is not possible to dwell at any length upon the mental causations of disease. Mental science and physical science do not disagree, even though at times they appear to, principally because physical scientists retain certain theories which have no foundation in fact. I have tried to present in this treatise on diet only those facts which have been proven to be

true, and I do not ask the reader to believe anything written herein which cannot be demonstrated. If you will try to understand the principles of diet as outlined in this book, and will practise the rules laid down in a conscientious manner, the results which follow will be so convincing that they can hardly fail to induce complete belief, and when that belief is established you will see very clearly the road which leads to health. When sufficient physical changes make themselves unmistakably felt, you will then have unconsciously developed that faith which will add the best mental treatment possible in connection with a proper scientific regime, and such a combination can hardly fail to lead you to the perfect health to which you are entitled.

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